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# THE PHOTO LITHOCRAPHER

★ 1776 BROADWAY ★ NEW YORK, N.Y. ★

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MAY  
1938

**LITHOGRAPHERS...WHO USE THEM...**

**FAVOR THESE**

**HOE**

*Super-Offset Presses*

a complete line of equipment designed for maximum production of fine quality lithography

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**THREE COLOR**

**FOUR COLOR**

**In Several Sizes**

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Models for perfecting or for printing only one side of the web

*Metal decorating*

Single and two color models, with or without automatic feed, for handling a wide range of metal thicknesses.



A Hoe representative will be glad to describe any of these presses to you in greater detail; and to explain the unique production advantages of Hoe Equipment.

*Write, phone or wire*

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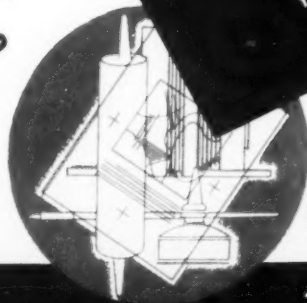


- Color process plates . . black and whites . . highlights . . originals for hand transfer . . posters . . crayon color plates . . negatives or positives for machine transfer . . or photo-composed press plates . . al-bumen or deep etch.

Here is a 50x70 inch press plate in the large composing machine which is one of the features in our completely equipped offset plate making plant. Precision photo-composed press plates, either al-bumen or deep etch, is another of the many services available to our customers. Manned by skilled craftsmen, this department operates on a twenty-four hour schedule to give speedy service. We will make your press plates from your own negatives or positives, or we can make your originals as well, if you desire. . . Again, we can convert your transfer plates or stones to negatives, and give you press plates to any layout. Try Graphic Arts Offset Plates and note their smoothness and quality. Learn for yourself how they increase production over hand transfers . . . and how they cost less, too! . . Write, wire or phone MAin 2167.

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Strecker Salt is packed in pound containers at \$2.25 per lb., which makes three gallons of plate etch; larger packages are correspondingly lower in price.

- |                    |                    |                   |
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| Graining Marbles   |                    |                   |
| Graining Quartz    |                    |                   |

# THE SENEFELDER COMPANY, Inc.

32-34 GREENE ST.

"Everything for Lithography"

NEW YORK, N. Y.

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# THE PHOTO-LITHOGRAPHER

*Published in the Interests of Lithographers  
to Increase Sales, Efficiency  
and Quality*

WALTER E. SODERSTROM, *Editor*

DONALD L. GUTELIUS, *Associate Editor*

SAMUEL D. WOLFF, *Advertising Manager*

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Volume VI

MAY, 1938

Number 5

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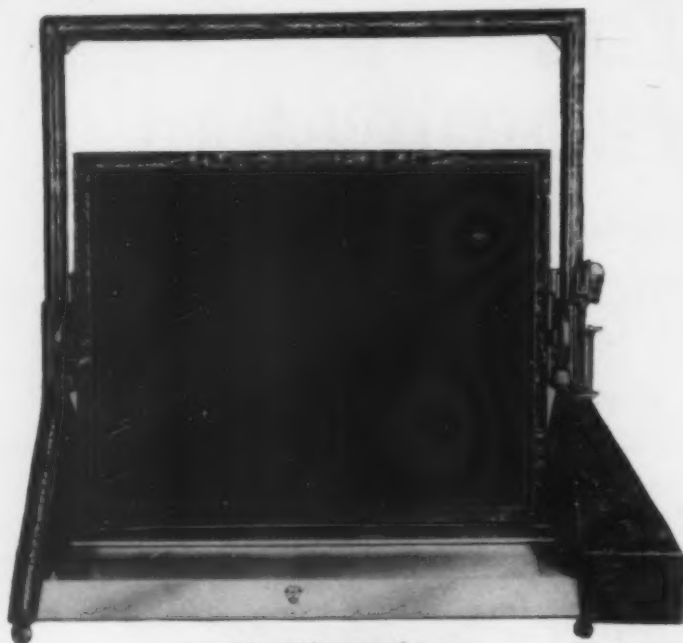
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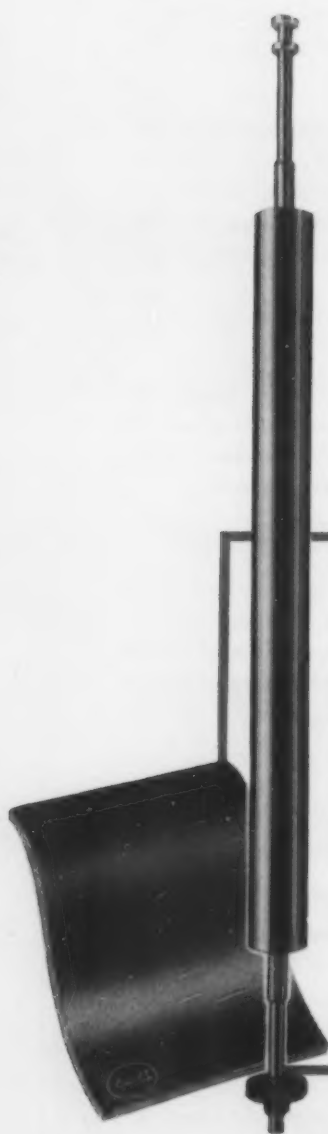
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compliments. The machine in the foreground is the one  
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These presses make a nice lineup, don't they?  
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Yours sincerely,  
THE GRAY PRINTING CO.  
*Robert Gray*

# 4

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MAY 1938

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— STECHER-TRAUNG LITHOGRAPH CORPORATION

"Referring to your letter of January 27th, regarding the three Zenith Graining machines, which you installed for us, we are very pleased to advise you that these machines have been operating very satisfactorily, and the plates which they produce are of uniform quality. We also wish to thank you for the very fine service that you have given us on these machines. It is a pleasure for us to recommend these machines to anyone contemplating their purchase."

— THE STROBRIDGE LITHOGRAPHING CO.

"We have been using your Zenith graining machines since 1930 and we are pleased to say that we have found them entirely satisfactory. These machines are very smooth and quiet in operation, very efficient in the production of graining plates, and they have never caused us any delay the entire time we have had them. Through the use of the patented dumping devices we are able to consistently use steel marbles to better advantage, by putting them in the machine without scraping the plates. We are able to recommend your machine any time, as we consider it the best in the market."

—SCHMIDT LITHOGRAPH COMPANY.

Literature on Zenith equipment and rebuilt presses will be sent you on request.

# ZARKIN MACHINE COMPANY, Inc.

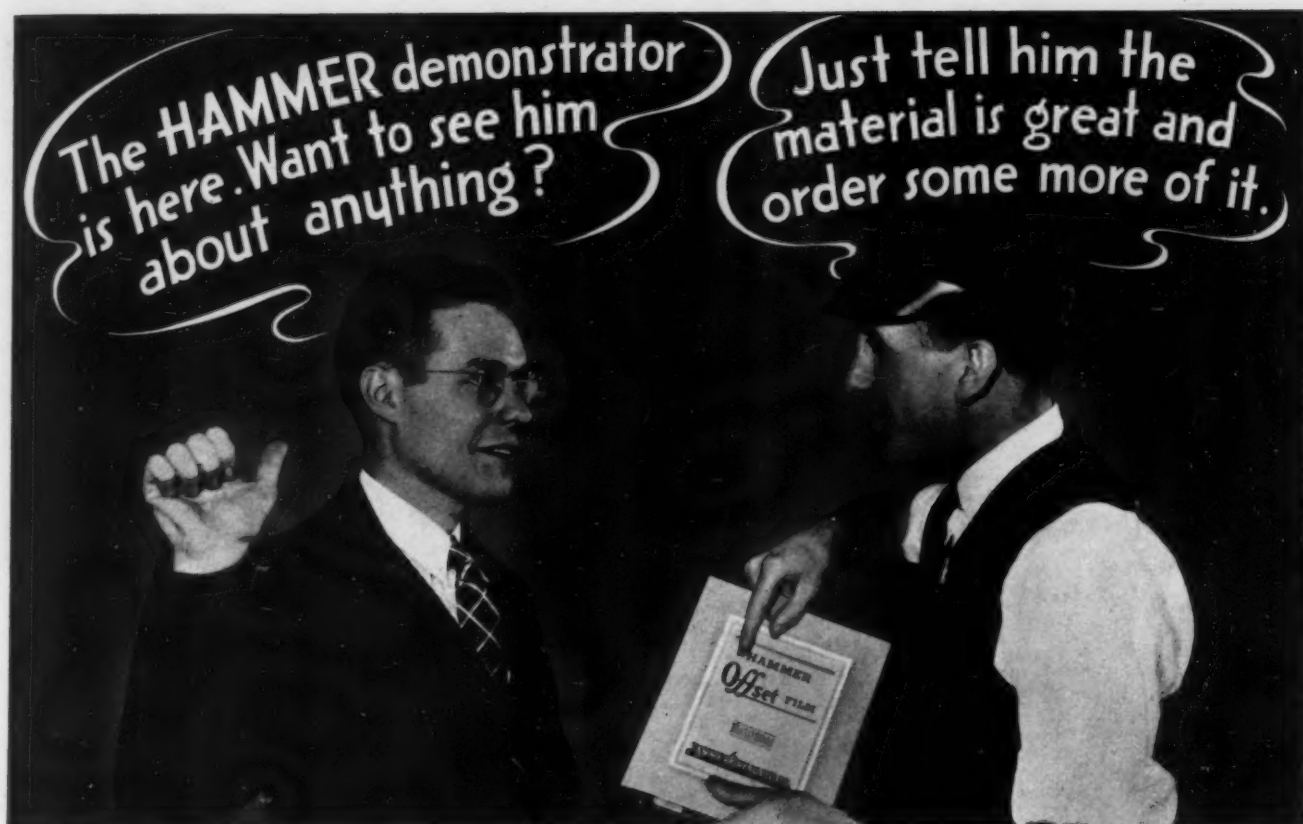
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NEW YORK, N. Y.

THE PHOTO-LITHOGRAPHER



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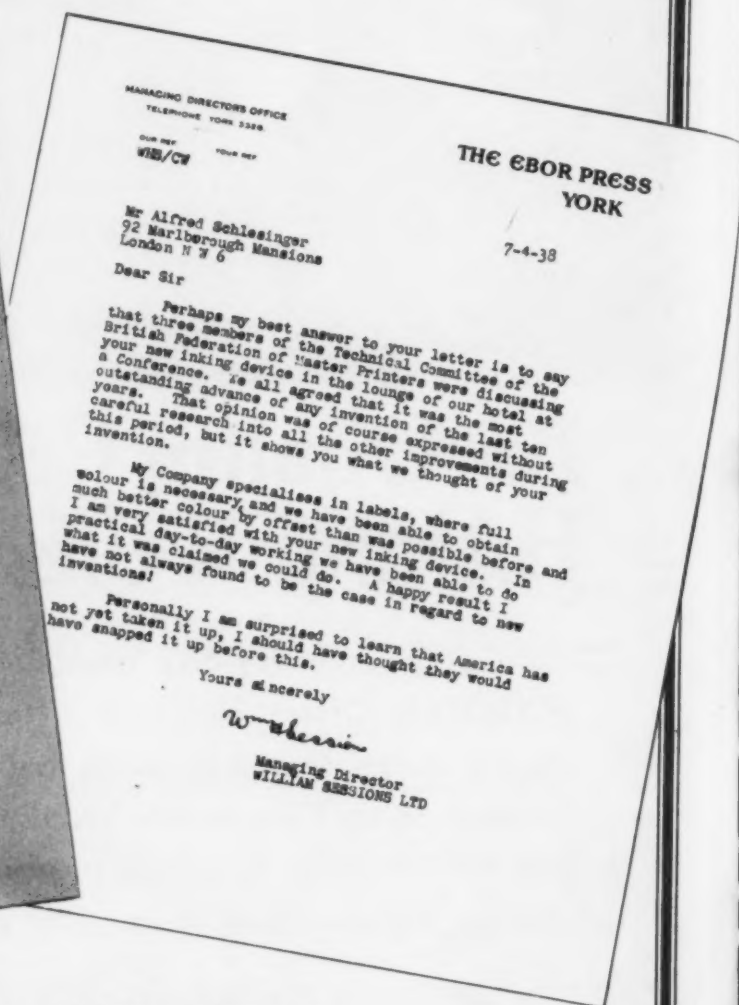
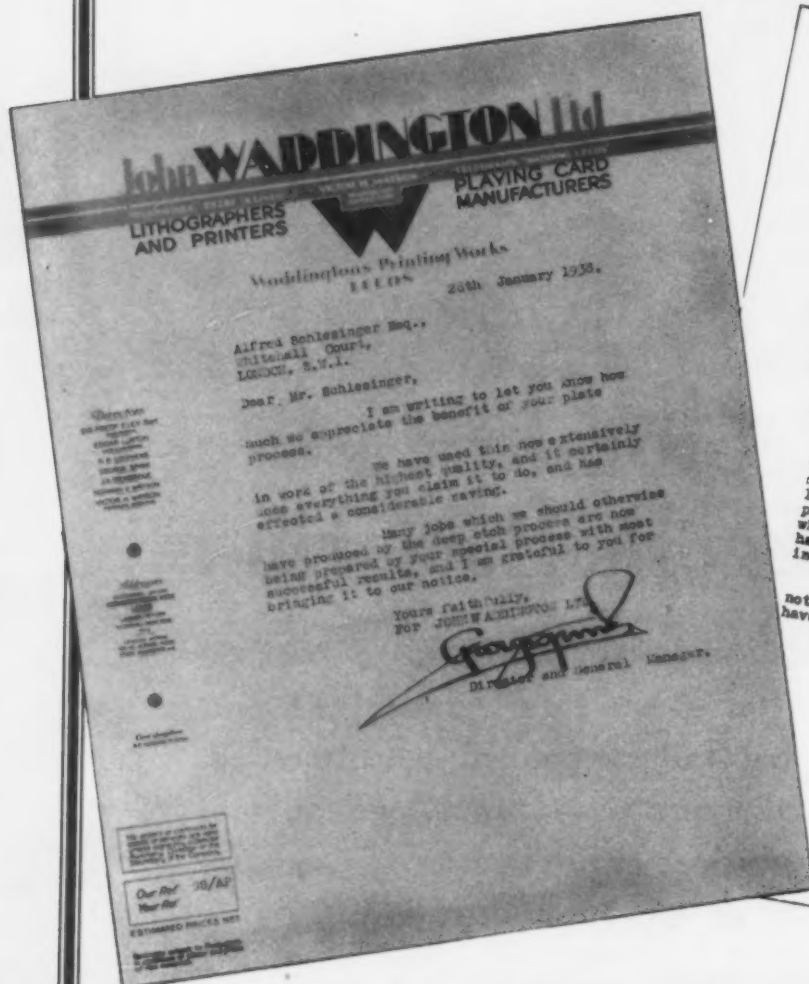
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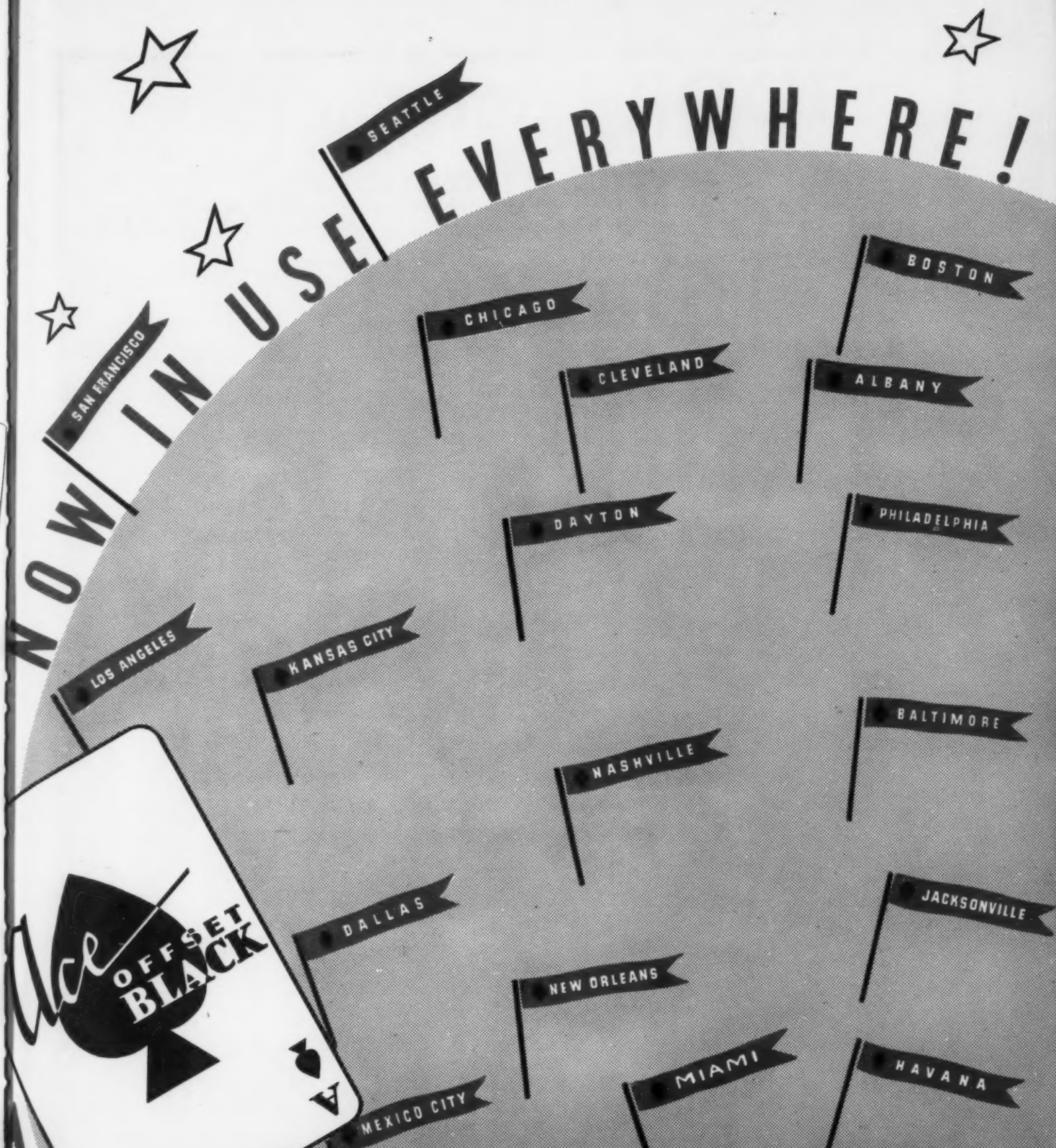


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offset plates and the new Schlesinger inking system  
will be furnished on application before May 25th to

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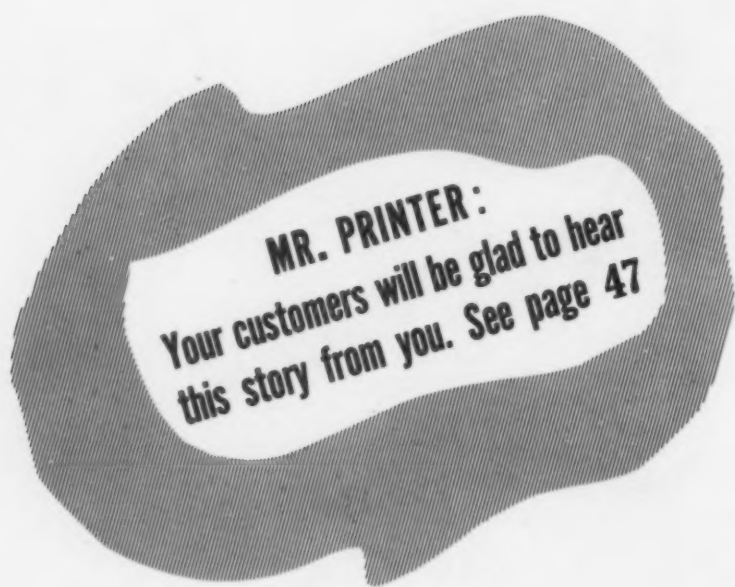


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And it sells at a reasonable price—far below what you have been paying. It isn't charity, just good business. We make a profit on it.

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You know how much you have been paying for vulcanized oil rollers and you can find out the prices of Bingham rollers.

Subtract the latter from the former and you will find how much of a tax you have been paying to monopoly.

Bingham rollers earn more for you than higher priced rollers because they have a longer working life.

Why not put them to work for you NOW?

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CLEVELAND  
NASHVILLE

DES MOINES  
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DALLAS  
HOUSTON

INDIANAPOLIS  
KALAMAZOO  
KANSAS CITY  
ST. LOUIS

MINNEAPOLIS  
PITTSBURGH  
SPRINGFIELD, O.  
OKLAHOMA CITY

**MOLLETON**

*flannel*

**RUBBER BLANKETS**

---

SEWN MOLLETON & FLANNEL COVERS

---

SEAMLESS MOLLETON & FLANNEL COVERS

---

DAMPERS . . . LEATHER ROLLERS

---

HAND ROLLERS . . . SCRAPER LEATHER

---

SEAMLESS FOUNTAIN ROLLER COVERS

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CANADIAN AGENT: CANADIAN FINE COLOR CO., 240 LOGAN AVE., TORONTO

# CARTER

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Headquarters for

*Strictly Pure • Always Uniform*  
Burnt Lithographic Varnishes  
Burnt Plate Oils • Dryers, Etc.  
Gloss, Overprint & Offset Varnishes  
White Metal Finishing Varnishes

## C. W. H. CARTER

*Established 1865*

100 Varick Street • New York

*Chicago Sales Agent: Edward J. Lewis, 9 S. Clinton Street*

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**We Originate • Others Imitate**

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# THE PHOTO-LITHOGRAPHER

*Published in the Interests of Lithographers to Increase  
Sales, Efficiency and Quality*

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Volume VI

MAY, 1938

Number 5

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## EMINENT AUTHORITIES WILL PRIME L. N. A. FOR MORE AND BETTER BUSINESS

**M**ORE and Better Business will be the theme underlying all addresses at the 33d Annual Convention of the Lithographers National Association, to be held May 10, 11 and 12 at The Homestead, Hot Springs, Virginia, at which Advertising and Sales Promotion, Marketing and Public Relations, Research and Sales Management will be stressed.

Following the welcome to members and guests, expressed by General William Ottman, president of the L. N. A., which will open the first session on Tuesday morning, Edwin B. George, author and economist, at present connected with Dun & Bradstreet, Inc., New York, will address the Convention.

Mr. George will discuss the rela-



GENERAL WILLIAM OTTMAN  
*President, L. N. A.*

tions of government and industry and the new responsibilities resting on management to redesign its policies in terms of the changed and changing economical, political and social situation. Mr. George is admirably equipped for the handling of such a topic, by both present and past associations, which have included that of Trade Commissioner for the U. S. Department of Commerce, travelling all over the world in this capacity. He is now with Dun and Bradstreet as Associate Editor of "Dun's Review."

Frank W. Lovejoy, Sales Executive of the Socony-Vacuum Oil Company, New York City, formerly with Vacuum Oil Company and New York Sales Manager of the Curtis Publishing Company, who is noted as an

expert in stimulating and pepping up sales organizations, will follow Mr. George on Tuesday.

Following the report of the Nominating Committee, first on the program at the Wednesday morning session, Alfred B. Rode, President of Rode & Brand, New York, will speak in his other presidential capacity in connection with the Lithographic Technical Foundation, Inc., discussing the progress which has been made in the educational and research activities of the Foundation during the last year.

E. P. H. James, Promotion Manager of the National Broadcasting Company, who has achieved front position in advertising circles because of his activities in the development of the radio-merchandising field, will



MAURICE SAUNDERS  
*Chairman, L. N. A. Board*



W. FLOYD MAXWELL  
*Secretary, L. N. A.*



ALFRED B. RODE  
*President, L. T. F.*



FRANK W. LOVEJOY



E. P. H. JAMES

follow Mr. Rode. His address will be concerned with direct advertising, with particular reference to the problem of merchandising and promoting radio programs of national advertisers, a field which he believes has not been fully exploited by either advertiser or media.

One of the fathers of the broadcast-advertising business, "Jimmy" James has directed N. B. C.'s promotion activities since 1927, all of that company's publications being prepared under his direction.

A Window Display Symposium will be the third feature on Wednesday morning's program. A direct result of the publication of the recent award-winning research report, "Window Display Circulation and Market Coverage," this important feature of the Convention program will be conducted by Albert E. Haase, formerly Managing Director of the Association of National Advertisers, one of the directors of the Window Display Research study, and now associated with Townsend & Townsend, Inc., New York.

Frederick L. Wertz, president of Window Advertising, Inc., New York, will bring to the symposium the background of his twenty-five years of selling experience in the lithographic industry prior to the outstanding job he is now doing in the display installation field. Arthur E. Tatham, Advertising Manager of Bauer & Black, President of the Chicago Federated Advertising Club, and an instructor in advertising at Northwestern University, will present the "consumer's" point of view on the subject of this rapidly developing medium.

Following the election of directors at the Thursday morning session, William R. Kuhns, editor of "Banking," the Journal of the American Bankers Association, will have an important, direct message for bank and commercial stationers. Mr. Kuhn's early newspaper experience—reporter on the Paris Herald, foreign correspondent and news service representative of the United Press in this country, Europe and the Far East, cable editor and later financial feature editor with the Associated

*(Continued on page 58)*



EDWIN B. GEORGE



ALBERT E. HAASE



FREDERICK L. WERTZ



## WE CONTACT THE SAME MARKET

*Says*

**JAMES W.  
HURLBUT**

Director of Publicity,  
Radio Station WJSV,  
Washington, D. C.

**T**HE man who sells radio time and the salesman of lithography contact the same prospects. Their problems are the same; and the money which pays for their wares comes out of the same budget. Nevertheless, in spite of this overlapping, there is no direct competition between the two media and the salesman of each can advantageously employ the ballyhoo of the other.

In a certain, efficiently-operated, medium-sized station with which the writer is familiar, the sales staff invariably employs lithographed promotion material of various types to boost the sale of show ideas developed by the program department.

The first example which comes to mind is a daily home economics program presented by the station. The broadcasts are cooperative affairs, in that the sponsors are dealers in electrical household supplies and dealers in various food commodities. Sundry ideas have been advanced and experimented with in order to build up the air and studio audience to the limit. Interest was first stimulated by playing air games several times a week with theatre passes as prizes for correct answers—replies to be by telephone. This was fine until response became so great the telephone company complained of being overtaxed.

When it was found necessary to make replies by letter, a contest blank was devised which listed the prizes, set forth the rules and explained the contest as well as picturing the products of the sponsors. The blanks were lithographed in color and sent out to hundreds of applicants every day. The purchase order ran into the thousands.

As the program grew and the studio audience expanded, the air audience became more and more curious concerning the talent which they heard on the program. Several dealers, at the suggestion of the station promotion manager, immediately took advantage of this curiosity and made up bill and statement enclosures with several half-tone shots of the artists on the program. They tied in advertising copy and invited the air or studio presence of the recipient. Lithographed on special finish offset stock they were sent to all customers and did an excellent job. One enterprising dairy firm which participated in the program distributed folders generally over their milk delivery routes to customers and prospects alike. This resulted not only in new customers, but also larger orders from the old buyers, as ideas for out-of-the-ordinary uses of dairy products were incorporated in the daily broadcasts.

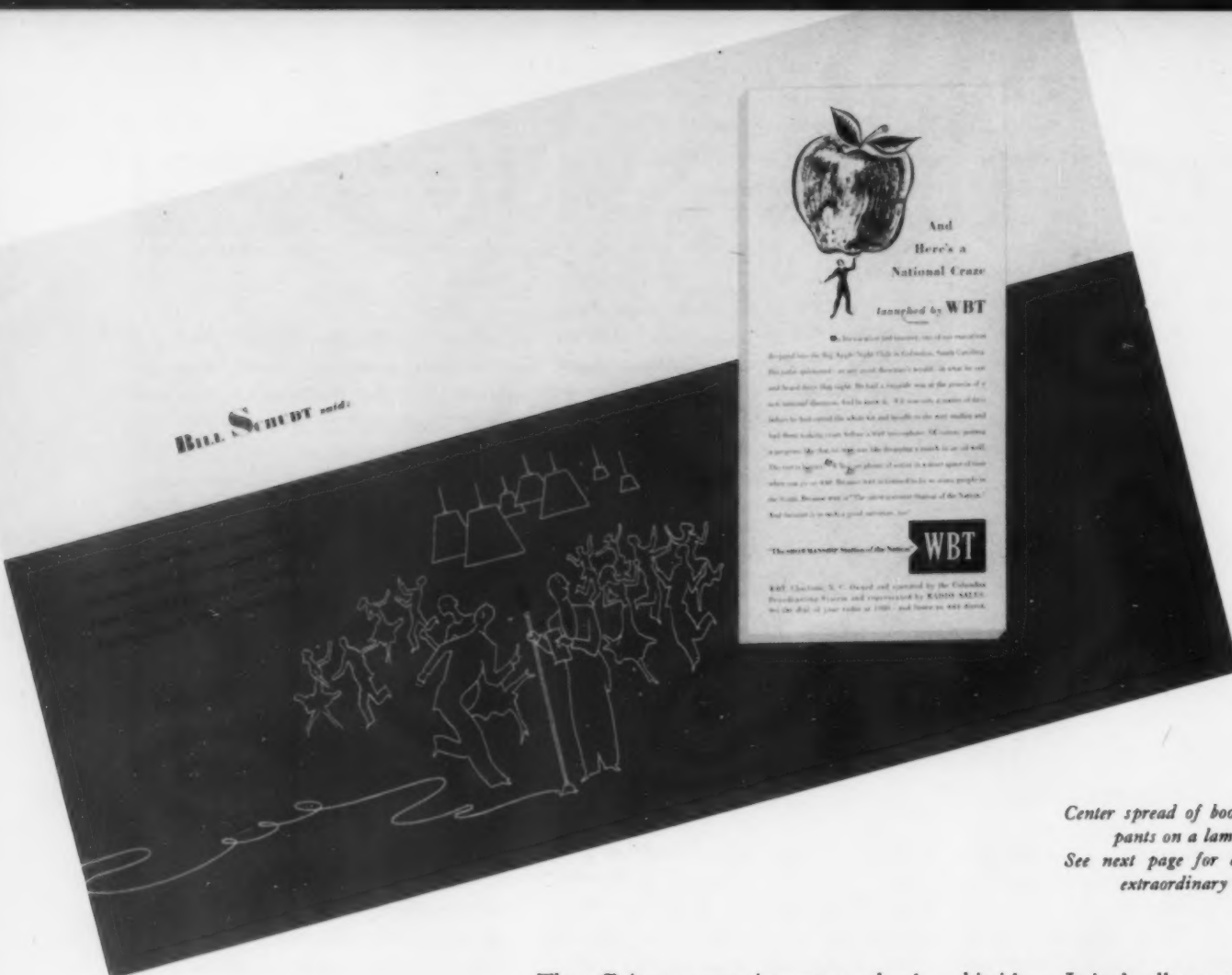
The next step was to form a listener's club. Listeners desiring membership in the organization were required to write in to the station. An attractive novelty membership card was mailed to each woman responding. The membership list soon grew into the thousands, making necessary several re-orders from the lithographer of the two-colored, medium weight cover stock, card. The list of names and addresses of interested women will be used in the future as the basis of a mailing list for promotional material, including a four-page weekly club magazine which is now in the making.

Another idea which has just been developed is the distribution of a weekly food feature column written by the station's home economist to over three hundred weekly newspapers in three neighboring states. The column is typed and run off by a local photo-lithographer and will probably be a steady repeat job.

All this promotion came from the radio station. It might as well have been engendered in the mind of the lithographic salesman, since the same results would obtain, regardless of where the ideas originated.

The second example concerns a brewery which was sold a weekly two-hour dance music program on Saturday night. In order to build up





Center spread of booklet, "It's the pants on a lamb chop." See next page for details of this extraordinary booklet.

mail response the station promotion manager suggested a give-away offer. In this case, the promotion man reasoned that a large proportion of the audience might not dance to the music, but only listen to it as it did something else for entertainment. Looking into the crystal ball he divined that bridge was one of the major local Saturday night diversions and suggested the premium be a set of cardboard coasters made up with contract and auction scores on each coaster. The response to the offer was terrific and again the lithographer profited.

Speaking of breweries brings to mind still another example. A local brewery had been sold a community singing idea. The program went over in a big way and the studio audience for the twice-weekly program crowded the fifteen hundred capacity of the hotel ballroom where the shows originated. The only trouble encountered was in getting the group to sing, since many of them were unfamiliar with the words of the songs.

The efficient promotion man solved this in his stride by ordering lithographed song sheets with the lyrics for the program as well as a punchy humorous plug for the product. The program ran twenty-six weeks, which meant fifty-two orders for the photo-lithographer.

Hundreds of other tie-ins have been used by radio program sponsors, and many of these have appeared in articles in past issues of *The Photo-Lithographer*. Doubtless, enterprising salesmen in all parts of the country have capitalized on these ideas and are drawing in regular business from the programs sold by radio time salesmen.

One enterprising local lithographic salesman, an acquaintance of the writer, makes it a practice to spend as much of his time as possible listening to the four local stations and checking the local advertisers. After analysing the type of program each presents he devises for each one a simple, effective correlated promotion idea employing lithography. The next step, of course, is to contact the advertising managers of the individual companies and sell them

his ideas. It isn't all gravy, by a long shot, for some of the schemes click right off the bat and others simply won't jell at all. Nevertheless, enough business develops to make it well worth while, and in addition he often garners business of an entirely different nature which he might never have a crack at if it weren't for his own enterprise.

There is another side, too, to the potentials of cooperation between the radio time salesman and the lithographic salesman, a side which has been discussed in these pages in past articles. This angle is radio sales promotion.

Radio sales departments, local and network, have found it much to their advantage to use lithographed promotion material to supplement their sales efforts. Of course not all the pieces are lithographed, but so much of the radio sales story can be told best by picture and graph that lithography is used to a surprisingly large extent and in an extremely effective manner.

Two unusual examples of quality promotion pieces have recently come

to the attention of the writer. One is the product of the promotion department of the Columbia Broadcasting System; the other the brain child of William A. Schudt, Jr., General Manager of Station WBT, the Columbia outlet in Charlotte, North Carolina. WBT, incidentally, is the winner of the current showmanship award given annually by *Variety Magazine* to the network-owned station which excels in exploitation.

The Columbia piece is titled "CBS Listeners and Dealers." Board-covered and cloth bound, its two hundred and fifty-six pages show the results of six years of testing the listening areas of Columbia stations as applied to dealer listeners as well as radio families. In the words of the preface of the publication:—

"1. These maps indicate the number of actual listeners, as well as relative levels of listening, for each Columbia station.

"2. They show day and night listening separately, since every broadcasting station serves different areas day and night.

"3. They are based on actual listening only, not possible or potential listening.

"4. They show the guaranteed minimum listening areas of each station: where an average new program will be heard in its first few broadcasts—not the accumulated coverage for all the station's programs.

"5. They are based on degree of coverage of the total market, not merely on the radio families of the market."

To effectively present such data the book employs an accurate map for each CBS outlet showing primary

and secondary evening listener areas in screened tints; as well as a similar map showing evening zones of dealer influence. The maps are printed in green and occupy approximately three quarters of a two page spread. The rest of the space is given over to legend and to a chart of market data

*Thoroughly analyse any piece of sales promotion. Think of it in terms of influencing the reader to buy. Appraise it somewhat as you would personal salesmanship. Then you will most likely come to this conclusion:*

*The real selling influences come from the ability of the writer and the layout man to put themselves in the place of the average reader in a particular market—to tell the story not alone in a convincing manner (by "talking the same language" as the reader) but also in an interesting way, which calls for imaginative conception and showmanship—doing on paper the pleasantly dramatic things that the reader might like to do himself.*

*Generous space is given on the preceding page to two typical pages from the radio booklet, "It's the pants on a lamb chop," so that some of the copy can be read. It is worth reading because it is an outstanding example of showmanship in advertising.*

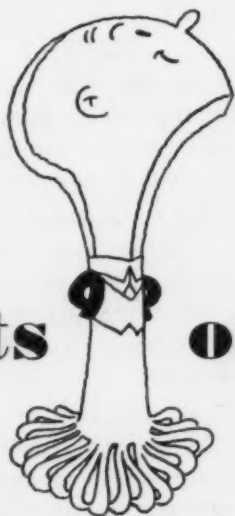
concerning each area. In addition, a large spread map is bound into the volume showing listener and dealer influence areas for the entire United States.

It is interesting to note that the book was compiled from data obtained by the distribution of two other lithographed pieces. One, the daytime offer, was a map, 11" x 17", lithographed in colors on two sides, giving the location of every Columbia station. The other, the evening offer, was a radio game variation of the map, with the same specifications. The fact that a total of 520,155 families responded to the offers will give some indication of the press run involved.

The WBT production is a masterpiece of promotion. It is titled "It's the pants on a lamb chop" and deals with the exploitation efforts of WBT during 1937 which won for the station the Variety Showmanship Award. Each of its 24, 11" x 17", two-color pages shows a reprint of an individual ad which WBT ran during the year to publicize a special broadcast illustrating the reasons for WBT calling itself the "Showmanship Station of the Nation." In the accompanying text, a different member of the station Special Events staff explains the individual ads. Brown reverse plates carry humorous line drawings pertinent to the text. In addition, four pages of half-tones show the members of the Special Events staff and the awards won by WBT. The booklet is really "the pants on a lamb chop."

And, speaking of "pants on lamb chops," it might be considered that lithographed promotion pieces play that role in relation to radio sales—the dressing that sells the facts.

## it's the pants on a lamb chop



*Who would fail to open a booklet containing a title and illustration such as this!*



## STUDIES IN *Salescraft*

For Administrative Heads and Ambitious Salesmen

By WILLIAM WOLFSON

Part Six

IN the directing of salesmen the sales manager does so through two means. One, by direct order. Two, through suggestion. His success depends upon *how* he orders and suggests, and *why* he does so.

No caprice should govern the actions of sales administration. Orders must be based upon a knowledge and understanding of the affairs at hand. Records must be compiled and maintained, consulted and effectively utilized. There must be sane and logical reasons for every order issued—whether to the individual salesman or to the entire force. These reasons must satisfy the sales manager, himself, and also his superiors, as well as the salesmen, should he be called upon to defend or to justify his orders.

Obviously, orders are of various types. Let us examine a few of these:

- (1) John Doe, salesman, receives a typed slip instructing him to call upon Mr. Prospect at 2 p.m. Wednesday. There are other details noted on this slip.
- (2) All salesmen receive a bulletin from the sales manager. With the bulletin is a pad of "release" forms. The bulletin informs the men that annoyances and losses have resulted on account of customers' poor reproduction copy. Heretofore, although salesmen cautioned customers the finished copies would look terrible,

the customers stated they would be all right for the purpose intended, and this was conveyed to the order clerks; but, in many instances, after the job was delivered, the copies were rejected and the customers refused to pay. The defense of the customers was: "Why didn't you tell me the copies would be so bad." The argument of the salesman was: "I told my customer his copy was poor, that the finished job would be a rotten one, but he told me to put it through." Therefore, on future cases of this sort, the customer was to sign one of these release forms, absolving the salesman and the house of all responsibility for appearance and quality, and agreeing to take the job no matter how sorry a mess it turned out to be.

- (3) A bulletin to the sales force, requesting that portfolios be kept neat, soiled samples discarded and replaced by fresh ones, etc.

The first order is definitely an assignment, and is a type of order usually attended to by the salesman. He may have another appointment at the same hour; but such matters are readily ironed out.

The second example, that of the bulletin, may be termed a general order. Explanations are given. Naturally, the release slip is not needed when the customer is willing to pay

for services that the house can render, in order that the copy be prepared correctly.

The third example is more of the nature of a suggestion. As such, it may be disregarded. Of course, should the bulletin be strong enough, there is an immediate effort made to remedy the condition; but, salesmen being what they are (see Part Two, January, 1938, issue), they will eventually slip back in this respect.

This third example serves as introduction to another phase: the relationship between the manager and his men. As indicated, he deals both with the individual salesman and the entire group. The periodical sales meeting is helpful. Within such organizations as photo-offset houses, whose salesmen operate locally, the men are always available since they are not travellers out of town. They can be gathered together, therefore, at stipulated periods.

Through personal experience I have found a sales meeting of about two hours' duration the most practical. The meeting should be called for the evening, after hours, in order not to interfere with daytime activities. There should be a definite day selected, so that the men know in advance the date of these meetings. It is desirable at the conclusion of the meeting to go out to a selected dining room for the evening meal, the cost of which is borne by the house.

Sales meetings of this kind should be scheduled either monthly or semi-monthly. It is up to the sales manager to originate programs both interesting and educational. There must be routine, obviously, yet sufficient variety should not be neglected. It is at sales meetings that the sales manager can review general orders and bulletins issued, renew emphasis on such things as slovenly kept portfolios, etc.

I give the program of one sales meeting that I have used in the past:

1. A 10-minute talk by the sales manager on some angle of selling;
2. A 20-minute address by the president, bearing upon sales promotional literature and other aids to be issued;



3. Fifteen minutes devoted to an open forum in discussion of the president's address;
4. A quarter of an hour to half an hour with another company official in the chair, pertaining to complaints against salesmen. No names are mentioned, cases are merely brought up, "bulls" explained, wrong practices described.
5. A half-hour in which salesmen make complaints against the house. Turn about is fair play, and the men are thus given an opportunity to get things "off their chest" rather than nurse grievances. (Note: While such a program of complaints on both sides is valuable for letting off steam, it does not pay to make this a permanent feature of all programs.)
6. Talk by a salesman upon a subject given to him at an earlier meeting. Thus, at each meeting, a different man is called upon.

Here are other program features that I have employed. A series of meetings at which the technicians of the plant were called in to lecture; first, the camera man; second, the stripping department; then the plate makers, and so on down the line. These proved to be very educational, and it is surprising how salesmen take to such a feature. Many questions are fired—and answered, and the result is a better understanding of what they are selling on the part of the salesmen.

Another series of meetings was built around outside speakers invited to the meeting. We had a bright paper salesman talk about paper; and at a later meeting he was instrumental in securing for us a number of motion picture reels on paper making. We called in, too, an official of a composition house; an outside bindery man; a commercial artist; a seller of negatives; a photogelatin man; etc.

Now and then, for the sake of variety, we cooked up something like this: One salesman acted as the purchasing agent, and the other members of the force came before

him for interview. For example, a newcomer to the sales force acquired valuable experience. The "purchasing agent" gravely received him, accepted his sales talk, and requested a quotation on a 13-page booklet. When the salesman promised to submit a quotation the next day, a howl of laughter resulted. The salesman was immediately put at his ease by the sales-manager; and then the interview was discussed by the meeting at large.

Anent the style of meeting as just described, I wish to quote from a published article, "Theater Technique for Sales Meetings" by Kenilworth H. Mathus. This is from a reprint we did for some customer. Unfortunately, the name of the periodical from which it was taken was not given:

"Business is gradually taking a leaf from the show world. . . . Let it be said that showmanship need not be elaborate or costly; it

can be extremely simple. There is, for instance, the case of one manager who wasn't getting many suggestions from his men, in spite of repeated exhortations. So he procured a small searchlight and focused it on the suggestion box installed in the salesmen's room. Within no time at all, the number of suggestions volunteered each month more than doubled.

"Salesmen in another office were getting a little careless about their personal appearance. A touchy subject, but something had to be done. The manager placed a large mirror in the sales room and on the glass posted this message, 'This Is How You Look to Your Prospect.'

"Getting rid of deadwood in the prospect files also lends itself to dramatic effects. In one office, salesmen annually gather to auction off their old prospect cards to each other. The men get up in meeting, outline the case of each prospect and ask for suggestions on how to sell him. If a



THE PENALTY FOR BEING Too GOOD

"I'm sorry, but Mr. Graham can't see you today. He says his sales resistance is too low."

(CONTINUED ON PAGE 68)

## "COPY FOR REPRODUCTION" by PHOTO-OFFSET

By THEODORE S. MILLER

A COMMON question frequently asked by the laymen, when reproduction processes are discussed is, "What kind of copy can be reproduced by photo-offset?"

My usual answer is "Any copy which has been written in script, printed, typewritten, hand lettered, hand drawn or hand painted, or any photographic print in black and white or color or any photographic transparency can be reproduced in quantities of 100-100,000 units in any one color or any number of colors." Of course this statement is very general since it covers such a vast variety of copy and therefore requires some explanation.

Because of the multitude of differences which exist between the numerous classes of copy submitted to the photographer for reproduction, the matter of "Copy for reproduction" should be diligently considered by both the advertising copy department and the proofing department. The author will attempt to make this article interesting to these departments and also to the photographers, by considering with them the best methods to use for the reproduction of suitable negatives. The interest of the opaueing, stripping and plate making departments in good copy will not be overlooked, for theirs is also an interest in a common end—the perfect offset press plate.

Basically the subject of copy can be analyzed in the following manner: Copy can be any one of the six individual combinations, as listed below:

1. Line and continuous tone.
2. Line in black and white.
3. Line in color (colored lines or colored background).
4. Continuous tone in black and white.
5. Continuous tone in color (opaque background).
6. Continuous tone in color (transparent background).

By line copy the author refers to hand drawn lines or type faces or printed lines, type faces or half-tones.

Continuous tone copy has reference to any photograph or painting bearing gradations of tone either in tints or shades of color or in variations of tone in black and white.

Since the sources of copy are legion the following general divisions of copy can be used to show differentiation in the secured copy:

### Black and white copy:

1. Clipped with scissors and pasted.
2. Prepared by hand or machine composition.
  - a. Hand drawn.
  - b. Typewritten.
  - c. Press impression on paper.
    1. Hand composed.
    2. Machine composed—Ludlow, Monotype, Inter-type or Linotype.
  - d. Press impression on cellophane.

### Colored copy:

1. Printed copy on colored stock in black or colored ink.
2. Oil painting on card or canvas.
3. Pastel.
4. Water colored sketches.
5. Transparencies in natural color (Dufay & Kodachrome).

To attempt to itemize the variations which exist in black and white copy and to suggest improvements would be too vague without practical demonstration, therefore the author presents the following generalized statements as characteristic of the wide band of existing differences:

- A. Character and quality of the lines of the copy.
  1. Clear, sharp, fine grey, solid, pitted, fuzzy, squashed, broken, etc.
  2. Color of the drawing, lettering or half-tone.

### B. Character of stock upon which lines or type is formed.

1. Smooth, glossy, rough, matte, dull, semi-dull, hard surfaced, etc.
2. Color of the stock.
  - a. Ivory, blue white, etc.

### C. Size of the drawing, lettering or printed original.

1. General requirements in the finished reproduction.

At this time, and for that matter at any time, it is hardly necessary to state that good copy reproduces best. The fundamental problem facing the photo-offset lithographer is, "What constitutes the best copy?" To enlarge on this question such thoughts as the following may be added:

What makes a copy easier to reproduce?

What are the causes for the poor negatives and plates?

What changes and adjustments should be made to show improvements?

Unquestionably, the person acquainted in a practical way with photo-offset reproduction might wonder how such questions can be answered without personal demonstration, since there are a myriad of conditions which are directly responsible for the jobs being submitted to the customers. The accompanying examples will illustrate in a small way several causes for the inferior reproduction work resulting from the lack of any consideration for character and quality of the lines of the copy.

Modern type designers are well aware of the value of simplicity in present day creations in type faces and also aware of the new uses to which type is being employed, e. g., in the production of proofs for offset reproduction.

(Continued on page 60)



# SPECIFIC APPEAL IN ADVERTISING LAYOUT

By FRANK H. YOUNG

Director, American Academy of Art, Chicago

A PROBLEM that confronts the layout man even before he sits down to his drawing board is the specific appeal of the advertising message. The layout artist should carefully analyze the element of specific appeal before proceeding to design an advertisement. Specific appeal involves three factors: the product or service advertised, the audience at whom the advertisement is directed, and the nature of the media in which the advertisement is to appear. These three factors play an important part in determining the arrangement and physical appearance of a layout because an advertising design should be suited to the product, audience and medium.

In general it can be said that the product will largely determine the audience. That is, every product or service appeals to certain groups or categories of persons and the nature of the product or service will often determine in advance who will be interested—or who *can* be interested—in it. Of course, many products and services appeal to everybody, and are said to have a mass appeal. But even in these cases, a product will usually have a particularly strong appeal to certain groups within the mass of the population.

These three factors, product or service, audience and medium are so closely intertwined as to form but the one problem of specific appeal and the layout man should keep all three factors simultaneously in mind in arranging a display. However, to clarify the problem these factors will be treated separately in this article.

First, what is the nature of the product or service? What purpose does it serve? Is it a luxury or necessity—or does it possess qualities of both? Is it cheap, moderately priced or expensive? What are its best

*The principles of layout to encourage specific advertising appeals, as described by Mr. Young in this article, are set down mostly in relation to their use in magazine and newspaper advertising. They are just as applicable, however, to direct advertising, posters, and counter displays—the type of advertising the photo-lithographer is most frequently called on to produce.*

*Mr. Young is well-known in advertising circles for his books and magazine articles on advertising layout.*

points? These are some of the questions the layout man should ask himself. The product may be anything—an automobile, typewriter or toothbrush—but whatever it is, it will have a certain character, will possess certain qualities which distinguish it. Or it may be a service, such as the telephone or a world cruise.

The nature of the product or service, considered purely by itself and apart from the audience or medium, will often determine the layout treatment. A strong, black treatment that conveyed a feeling of durability and strength might be best suited to displays for steel products, trucks, automobiles and tires while a blonde handling, suggesting purity, would be in keeping for foodstuffs, hygienic articles, linens and tableware.

Secondly, the layout man must determine who would be likely to want the product or service. He must visualize his audience if he is to succeed in arranging a display that will appeal to it. What kind of a person does the article or service appeal to? Is the audience educated, intelligent,

possessed of good taste? Is it a critical, sophisticated audience? What is its social and economic status—its buying power. Is it preponderately masculine or feminine, young or old, married or single?

As I have already said, there are products and services which appeal to practically everyone: young and old; men and women; rich man, poor man. Such a product is the automobile; such a service is the telephone; and who wouldn't like to take a world cruise? The only barrier here is buying power. Not everybody can afford an automobile. Even in these days of mass production of automobiles, with prices shaved to a minimum, only persons in moderately comfortable circumstances can afford to own and operate a car. But an advertising display for an automobile should be designed to appeal to as wide an audience as possible, and an audience of fairly high intelligence, stability and buying power. Though it is the head of the household who usually puts up the cash the whole family generally has a voice in selecting the make of automobile—back-seat driving starts even before the car is bought. The display has to sell the whole family.

Often the product will appeal only to men or women, and it may be that the appeal will be to definite age levels within these two groups. In the case of articles that appeal solely to the masculine world, such as male apparel, razors, smoking tobacco liquor and similar products, the use of strong colors, blacks and heavier type, is generally advisable. When the product has solely a feminine appeal a delicate arrangement, with generous amounts of white space, subdued colors and graceful type is often the most effective. This is especially true if the product itself is



*For Lovely Women*

*Dainty as an old-fashioned bouquet, Archer stockings form an intriguing line between shorter skirts and smarter footwear. They fit with a trim precision that accents the smartness of your costume. Designed for those who want only the finest quality hose, Archer stockings are always preferred by lovely women.*

ARCHER HOSIERY MILLS, COLUMBUS, GEORGIA

Archer  
Hosiery

*This advertisement which appeared in women's class publications has a distinct feminine appeal. The layout and treatment of its elements are nicely suited to the product, the audience and the media.*

dainty, as perfume or lingerie. With younger persons of both sexes a more frivolous, jauntier arrangement is permissible. An advertising display intended to impress debutantes or coeds, for instance, might have a gayer appearance than one intended for elderly matrons.

Next the layout man must consider the medium—newspaper, magazine or direct mail—and the general attitude of mind or prevailing mood of the reader of the various media. A newspaper reader, for instance, is generally apt to be a skimmer, turning the pages rapidly, looking for news of interest to him. His approach is hasty, not leisurely, and an advertisement, to attract and stop him, has to pack a hefty wallop. Much newspaper reading, particularly by

men, is done over the breakfast coffee, or on street cars, busses and trains while going to or from work. Women are generally more deliberate in their newspaper reading; moreover, they are often more interested in the advertising than the news and, in the case of department store advertisements at least, search the paper for them and read them thoroughly. Consequently, the layout man can assume that the interest of women can ordinarily be gained easier and held longer than that of men.

Magazine readers of both sexes are usually in a rather receptive frame of mind. We can visualize the average magazine reader as sitting down comfortably beside a reading lamp, prepared to spend several hours with the publication. The reader is apt to be

in a relaxed state of mind, open to suggestion. Since practically all magazines run their editorial matter through the advertising pages the reader, in the course of following a story or article through to the finish, is almost certain to observe many of the advertisements. Some of these advertisements are going to attract his attention; those that are best conceived and best designed will be able to hold his attention longer, usually, than would an equally good display in a newspaper.

Every magazine and newspaper appeals to a certain type of audience of different levels of taste, intelligence and buying power. Magazines can be broadly divided into class or mass publications, the slicks or the pulps; newspapers can be roughly termed conservative or sensational. Within these broad divisions, of course, many sub-divisions are possible. For instance, it is common to describe a publication as a men's or women's magazine. But to say that a periodical is a man's magazine is only to partly describe its audience. What kind of man reads it? That is a question with which the layout artist should concern himself. All sorts and conditions of men read the popular five cent weeklies while only certain categories read the sports, professional and trade publications.

While we must always allow for some duplication, nevertheless it is generally true that a sophisticated magazine like *Esquire* or a comic magazine like *Judge* appeals to an entirely different audience of men than the pulp magazines of the "wild west" and weird adventure type. The distinctions are just as sharp in the field of women's magazines. The expensive, elaborately designed monthlies featuring smart fashion and social articles appeal to a far different audience of women than do the "confessions" type of magazine. The audiences differ in both intelligence and buying power. It follows, I think, that an advertisement which might be effective with the men or women readers of one particular magazine might fail completely with the men or women readers of another.



Your Westinghouse Dealer has more to offer than the appliances he sells

NOT far from where you live, there is a store where you can buy a great many things not usually sold across counters. Leisure is one of them. Health, better sight, and better living are others. Wrapped up in packages, they bring a lot of happiness to any home.

Of course, the actual deliveries from this store are in the form of electrical appliances. But these are merely the physical means of bring-

ing you what you really buy. A Westinghouse electric range, for example, is not just a convenience of steel sheets, wires and automatic controls. It is better cooking results, cleaner and safer kitchen, greater economy for food, and more leisure time. A refrigerator is not merely an insulated box with a mysterious mechanism inside. It is safe food protection, abundant ice, crisp salads, and tasty desserts.

It is the same with all other electrical appliances—rasters or radios, washers or irons. You do not buy what they are. You buy what they will do for you.

The store that displays the Westinghouse sign will not only supply you with beautiful and efficient appliances, but will ensure you the happiness you are entitled to get from their use. Look for this sign when you need anything electrical.

**Westinghouse**  
*The name that means everything in electricity*

This excellent Saturday Evening Post advertisement makes a specific appeal to the housewife. The pictorial element of this layout quickly determines at whom the message is directed.

The editorial style and contents of a publication are a factor for the layout man to consider. Readers of a publication buy it because they like its editorial tone and style and it is reasonable to suppose that they will be impressed by a similar tone and style in the advertising displays. If a person likes a newspaper or magazine with screaming headlines, flashily written stories and a wealth of sensational photographs, the chances are that he will be impressed by advertising that resembles that editorial style. Or if he prefers a magazine or newspaper with a more sedate pace, he will probably favor moderate advertising displays and be annoyed at advertisements that scream at him.

Of course, in national campaigns, the same advertising display will usually be published in magazines and newspapers of various types and with various kinds of audiences. But, in general, advertising ought to conform to the tastes of a publication's readers. That is why, in the picture

magazines, we see so many advertising displays that are designed to resemble as closely as possible the editorial make up of the magazine. The displays consist chiefly of photographs, with little copy. For that reason, advertisements designed for newspaper comic sections are usually arranged in comic strip form.

As to direct mail, the problem of reader interest is more difficult than in either of the other two media. The broadside, folder or booklet is apt to hit the recipient "cold," it drops on his desk or in his mailbox out of a clear sky; not only has he not been put in a receptive mood for it but his first reaction is even apt to be one of resentment. The layout man, consequently, has to devise a very ingratiating approach; his chief problem is to make the exterior of the mailing piece so interesting as to practically compel the recipient to open it. Once he has opened it, there is a good chance that, if the message inside is



IT'S the thrill of a lifetime to discover that you can have exactly the home you want, at a price you can afford to pay, by building with concrete.

No matter whether your choice is a "traditional" design such as Colonial or English, or a "modern" mansion, concrete will make your home really your castle. For concrete's glowing texture and warm beauty are linked with rugged strength. Secure against fire, storm, invasion and decay, a concrete home is a safe haven for your family, your fine furnishings and household equipment. And it's always de-

lightfully durable—strong and warm in winter, cool and dry in summer.

How much? Concrete may add perhaps as much as your phone bill to the monthly payments on a home. Other the cost is no more than for ordinary construction—and you save money through lower upkeep and higher resale value.

CONCRETE FLOORS add comfort to your home. They're smooth, crack-proof, dry and warm. They take any covering—such as wood, carpet, linoleum, terrazzo—different in every room if you like.

The Smart Way to Build—How to Get a Concrete Home. Ask a manufacturer of concrete masonry units or a concrete contractor for the names of architects, builders and realtors experienced in concrete construction. Write for the free booklet showing attractive concrete homes and how to build them.

PORTLAND CEMENT ASSOCIATION  
Dept. 1-10, 53 West Grand Ave., Chicago, Ill.  
To receive information, send no money into the Portland Cement Association in connection with requests, estimates and orders to perfect your order, save waiting periods. Better homes and structures—better buildings, dams, bridges and more improvements. Supply these builders available in thousands of units.

The Saturday Evening Post was properly used by this advertiser in his effort to appeal to all members of the family. The picture used leaves no doubt in the mind of the reader that the message is intended for both a masculine and feminine audience.

attractively stated and arranged, he will give it a fairly careful reading. Catalogs and other mailing pieces sent in response to a request will usually find a receptive audience because if the recipient is sufficiently interested in advance to write for a copy he will, as a rule, be interested enough to read it.

### The Customer Is Only Hero

Joe Cook, comedian, once said "Of all my wife's relatives, I like myself the best." When he made that remark, he touched on a fundamental of all successful shows, and all successful selling. There is only one hero in any show—and it is not the fighter who gets the \$50,000 check, or the movie star whose name gleams in electric lights. It is the individual member of the audience who personally goes up on the screen and plays the lead—or into the ring and delivers the knock-out.

Similarly, in selling. The hero of any sale is the buyer—not the seller. I have heard selling referred to as a drama, with the salesman as the hero of the one act play. That's wrong. No mistake can be more expensive. There is only one hero in every sale, and that is the prospect or customer.

—Zenn Kaufman, before the Sales Department of the Bankers Commercial Security Co.



# Business Management

## AND THE SCIENTIFIC POINT OF VIEW

ANYONE familiar with the short history of photo-lithography as a business knows that its ranks have held, and continue to hold, too many executives who are excellent technicians, but have very slight business training, or men who depend too much on native aptitudes rather than on the application to the management of their businesses of broad and fundamental principles proved sound through the application to them of objective, scientific points of view.

The following excerpts from an address recently delivered before five eminent Canadian engineering and business institutes and associations by Harry Arthur Hopf, managing partner of Hopf, Kent, Willard & Company, nationally known management engineers and accountants, of New York and Boston, may inspire more business men who are engaged in the field of photo-lithography to apply to their work more fundamental thinking and more scientific points of view.

The address was originally published in *The Engineering Journal of Canada*. The excerpts are published here through the courtesy of Mr. Hopf.

After long experience in dealing with business men in a number of countries, it has been borne in upon me that they do not, generally speaking, think in fundamental terms. Most of them are technicians, familiar with the traditions, procedures and problems of the functions within which their experience has been generated. In other words, all their thinking has been vertical, and they have not acquired the habit of thinking horizontally, which is a prerequisite to successful exercise of the responsibilities associated with the direction of a business enterprise.

Under present-day economic conditions, when business appears to be ground between the upper millstone of the demand of labor for an increasing return upon its effort, and the nether millstone of the need for

lowering prices to the consumer, which is the only way to achieve greater distribution of goods, the necessity for thinking in fundamental terms about the internal and external problems of business is more urgent than ever. . . .

### What is the Scientific Point of View?

I have previously indicated that science and the scientific method are entering gradually into the field of business management. A business executive who does his work scientifically is more valuable to his company than one who, however well he may be natively endowed, allows rule-of-thumb methods and unsupported thinking to permeate his activities. . . .

Science is organized knowledge which has been submitted to the acid test of measurement and verification. It is not a hodge-podge of facts brought together in more or less related order; it is knowledge acquired through research, supported by utilization of the scientific method, i.e., observation, experimentation and formulation of verifiable law. . . .

### What is Business Management?

In order to facilitate understanding of what is to follow, it is desirable to set forth initially a definition of the term, "business management."

Despite the many definitions advanced by others, I have elected to define management as "the direction of a business enterprise, through the planning, organizing, coordinating and controlling of its human and material resources, toward the achievement of a predetermined objective." This definition, it will be seen, places the emphasis upon the dynamic aspects of management; in other words, it views management as an art, but, it should be added, with

complete acceptance of the scientific foundations upon which the art must rest.

It will be observed from the definition that the master-function of direction subdivides itself into the four functions of planning, organizing, coordinating and controlling. Broadly speaking, the first of these functions concerns itself with the formulation of a program of action, based upon present and probable future requirements and conditions; the second involves combination, development and adaptation of all appropriate structural elements; the third addresses itself to the establishment of sound integration, cooperation and motivation, and the fourth is connected with the measurement of performance, supervision and maintenance of standards.

Within the compass of the activities of a single enterprise, planning, organizing, coordinating and controlling, which are the *sine qua non* of management, must be applied first to the master objective of the enterprise, then to the major divisions of finance, production, distribution and facilitation, and then, through the greater and lesser organization subdivisions, to the last worker on the smallest operation. . . .

### What are Some of the Specific Problems to be Solved?

The first step in the application of the scientific viewpoint to business management, consists of realization of the fact that only through controlled investigation, experimentation and the building up of a body of verified principles, can management emerge from the trial and error stage to the attainment of certain and effective results. . . .

What are the problems which confront business management in seeking to achieve a predetermined objective? Bearing in mind the four functions previously stated, namely, planning, organizing, coordinating, and controlling, let me call attention briefly, under these headings, to some of the problems with which management is



bound to concern itself, even in progressive and apparently well organized institutions:

#### A. With Respect to Planning

##### *Analysis*

1. To what extent does useless work exist and how can it be eliminated?
2. What is the most effective manner of reducing peak loads?
3. Has each position in the organization been analyzed as to work performed and qualifications of worker?
4. Do space arrangements obstruct or promote the proper flow of work?

##### *Simplification*

5. What policy should govern the destruction of old records?
6. Has "paper" work been reduced to a minimum?
7. Can any operations be combined to advantage?
8. Can any operations be more advantageously performed by outside organizations?

##### *Standardization*

9. Are there any limits to the value of mechanization?
10. Have all forms and records been properly standardized?
11. Is there in existence an effective system of control over the origin, revision and elimination of printed forms?
12. Is uniformity of equipment carried throughout the organization?

#### B. With Respect to Organizing

##### *Combination*

13. To what extent are service functions centralized?
14. Is ultimate control centralized?
15. Is a centralized personnel department in existence?
16. Is a centralized planning department in existence?

##### *Development*

17. How far can work be advantageously subdivided?
18. Have changes in size been accompanied by the necessary fundamental changes in organization?
19. Has development of the organization structure been warped or restricted to conform to individual attributes of the executive personnel?
20. How many levels of authority are present in the organization structure?

##### *Adaptation*

21. To what extent is it advisable to change operations from a sequential to a simultaneous basis of performance?
22. Do the duties assigned to each executive call forth his best ability and engage his entire time?
23. Is any executive overburdened with duties?
24. Is authority placed as closely as possible to the point where action originates?

#### C. With Respect to Coordinating

##### *Integration*

25. Are the relations between staff and operating departments promotive of superior operating results?
26. Is authority clearly defined and allocated?
27. Is authority to make important decisions placed in competent hands?
28. Are all activities effectively co-ordinated?

##### *Cooperation*

29. Have executives and supervisors an organization viewpoint, rather than a departmental viewpoint?
30. Are systematic training procedures employed?
31. Are adequate measures taken to maintain high standards of health among employees?
32. Are suitable and comfortable working conditions provided?

##### *Motivation*

33. What is the most effective type of financial or non-financial incentive to be utilized in a given situation?
34. To what extent is it advisable to invite suggestions from employees?
35. How can the fetish of seniority be abolished?
36. What is the relation between remuneration and length of service?

#### D. With Respect to Controlling

##### *Measurement*

37. What is a fair day's work in given occupations?
38. What should be the elapsed time for given cycles of work?
39. How can this period, once established, be controlled?
40. Is each department measured on a profit and loss basis?
41. Is the performance of each individual executive measured?

##### *Supervision*

42. What is the relation of supervision to increased production?
43. How can the optimal degree of supervision be ascertained?
44. How many levels of supervision are in effect?
45. Is planning separated from performance?

##### *Maintenance of Standards*

46. What is the best method of checking given types of work?
47. How far should the checking process be carried?
48. How can detailed information best be transformed into control information?
49. Are satisfactory standards developed for measuring financial results?
50. Is the cost of compiling statistics and reports kept within justifiable bounds?

Comparatively simple as many of these questions seem to be, there will be found lurking in their implications vast areas for the application of intelligent investigation by means of the scientific method. Questions such as those that I have posed, and literally scores of others that can be cited, comprise the dynamics that attach to the performance of the task of management under present-day conditions.

#### What Qualifications Must the Scientific Executive Possess?

It will readily be deduced from what has been said that, in the last analysis, the problem involved in introducing the scientific point of view into management becomes, apart from certain impersonal aspects, an individual one, and that the attributes of the executives concerned constitute important, if not controlling, elements in its solution.

Some individuals are possessed of the scientific point of view; others are not. Some have the ability and inclination to acquire it; others could never conform to its rigorous demands. The type of executive who dismisses science with a snort of contempt and boasts of the possession of so-called "practical" qualities, is still far from rare in business.

Since the application of the scientific point of view to management seems to depend so much upon personal temperament and capacity, it may prove interesting, if not useful, at this point to describe some of the more important qualifications which, in my judgment, in addition to technical capacity, enter into the make-up of what may be termed the scientific business executive. I submit these qualifications as representing purely my personal viewpoint; it is possible that there are some in this audience who will not share it.

The scientific business executive is he who possesses, among other characteristics, the following:

1. A strictly impersonal viewpoint;
2. The ability to think in terms of management;
3. A passion for truth as revealed by the methods of science and research;
4. Adequate training in sound methodology and thorough grasp of modern statistical methods;

5. An ample cultural background;
6. An attitude of philosophic doubt;
7. Devotion to bibliochresis, i.e., the scientific use of literature;
8. A spirit of cooperation with other workers in the field, as well as with members of his own organization;
9. Success in the art of self-interpretation;
10. The saving grace of humor.

"True science," it has been said, "has no fetishes that it clings to in the face of evidence." Therefore, in the application of his energies to the solution of the problems confronting him, the scientific business executive may always feel confident that faithful pursuit of his objectives will lead inevitably to enduring satisfaction through sound accomplishment.

What opportunities are available to executives and to those who aspire to such positions, to prepare themselves for serious work of lasting value in their chosen fields of vocational effort? There are, first of all, the courses of formal training given by schools of business and similar institutions whose aim it is to equip their students with technical knowledge, joined to a firm grasp of principles, in field of their curricula. . . .

Next in line are the institutions which aim by means of the correspondence method to teach students who for various reasons cannot arrange to attend residence schools of instruction. There are at least two so-called "correspondence" schools with whose text books and methods of instruction I am sufficiently familiar to be able to say that the courses in management offered by them are comprehensive and thorough and, if faithfully pursued, are bound to equip the student with knowledge of practical value for executive positions.

But what of the executive, or junior aspiring to such a position, who devotes his entire time to the performance of his business duties and finds an extended course of training incompatible with the demands made upon him by his daily work? To such a man, ambitious to explore his chosen field of effort and to equip himself for greater responsibilities, an avocational interest of major consequence is presented through membership in organizations such as those represented here tonight. . . .

## Two Notable Photo-Offset Jobs

**FLAGGING** Attention with Color" is the title of a beautiful specimen book issued by A. D. Steinbach & Sons, Inc., lithographers, of New York City and New Haven, Conn.

Plastic bound in heavy board covers, with an impressive page size—13" x 16", this specimen book really does demonstrate how attention can be very effectively flagged with color in illustrations.

The full color, duotone, and black and white illustrations in the offset section of the specimen book have a depth, richness, and realism of color that give them an attractiveness and "flagging" power equal to illustrations done by any other process. In some ways, these offset reproductions have qualities that could be obtained only by the offset process. For instance, the important contribution of soft textured offset papers to the beauty of the reproductions was made possible by the offset process without sacrificing any qualities necessary in faithful reproduction.

The printing and lithographing plant of H. Dorsey Douglas, Oklahoma City, Okla., has good reason to feel proud of a book of 82 8½ x 11 pages, with stiff cover, overflowing (literally, for every page is a bleed page!) with hundreds of photographs depicting every phase of life in Oklahoma City.

The book was produced by deep-etch offset lithography. The negatives were made by The Litho-Negative Service, headed by Russell W. Scharber, Oklahoma City.

Aside from well edited copy, both text and pictorial, the book demonstrates the advantage of offset in making possible a book with impressive bulk, without sacrifice of photographic detail quite adequate to do its share in telling the story. Several maps in the book, containing myriads of the finest hair lines, and greatly reduced, retain their clearness, again with credit to the process used, even though they are lithographed on a deeply textured paper.

A nation-wide survey just finished by Lord & Thomas, New York,

indicates a great increase in the number of States and communities throughout the country that have started, or are planning to start, advertising to attract new industries and tourist trade.

Twenty-seven States, 32 counties or sections, and 127 municipalities expressed definite interest in advertising themselves, with 109 already operating under appropriations ranging from less than \$10,000 to over \$100,000. The Southeastern States led numerically among these, with 23 appropriations now being spent.

Chambers of Commerce were found to be most important in influencing the planning and execution of municipal advertising.

Photo-lithographers, especially those with creative staffs, should find a good cue to new and profitable business in the increased interest along the lines of State, county, and community advertising.

### *The Miniature Bit of Loveliness*

*the subject of the insert  
on the facing page, was  
snapped on kodachrome  
film by Frank A. Myers,  
treasurer of the Copifyer  
Lithograph Corpora-  
tion, Cleveland, Ohio.*

*This insert is the first of  
a series of inserts, each  
to represent the work of  
a member of the Na-  
tional Association of  
Photo-Lithographers.*

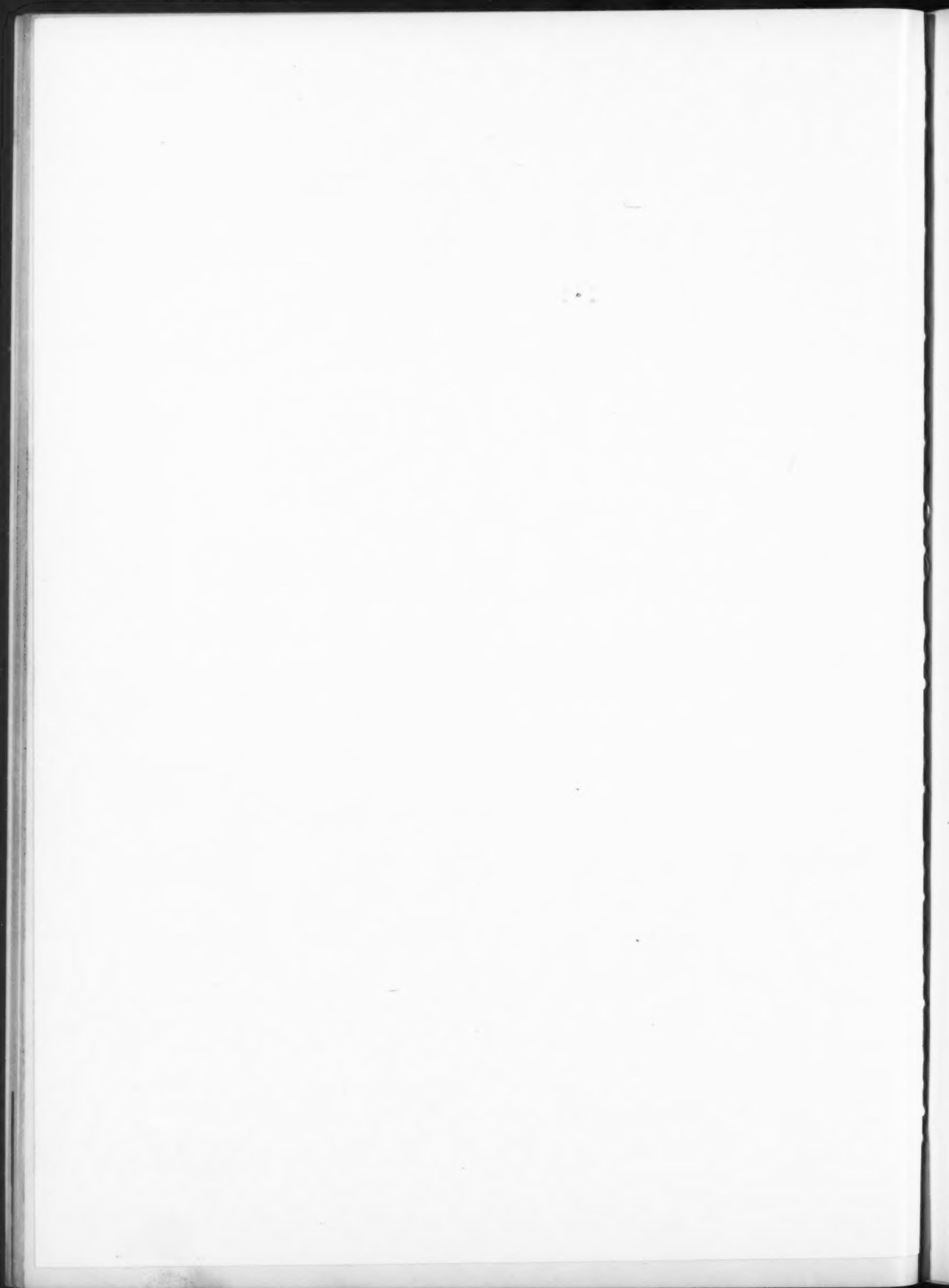
VOLUME TIGHTLY BOUND



CHROME COLOR PHOTOGRAPH  
BY FRANK A. MYERS

REPRODUCED BY FOUR COLOR PROCESS LITHOGRAPHY  
THE COPIFYER LITHOGRAPH CORP., CLEVELAND, OHIO





# Shading Sheets for Offset

MANY black and white line drawings may be greatly improved with the use of shading sheet patterns applied on the flat unshaded portions.

Shading sheets are especially adapted to this treatment where the illustrations have areas on which mechanical shading will emphasize some particular point of interest or on which large areas of hand shading are impractical from a time element factor.

A popular method of using these sheets is to apply them to the background of figure drawings, and drawings of objects to emphasize the article shown by the contrast created between it and the shaded background. They are also used to illustrative advantage in reproducing texture, grain or material of the object illustrated. In the accompanying reproductions you will find exhibits illustrating these points.

In planning the art work for shading sheet use, the best results may be secured by giving consideration for the pattern to be applied. If the sheet pattern selected is dark the remaining portions should be light and vice versa. If a number of patterns are to be used the contrast should be made by the patterns themselves. Too

## A TIP



*Shading Sheets are an offset natural for securing impressive illustrative effects at an economical cost.*

much hand drawn shadings in the portions using the Shading Sheet Patterns should be guarded against in order to secure pleasing effects.

Where several patterns are desired on tern number and designating the extent with a light blue pencil, giving the pattern a single drawing it is well to indicate this of each sheet pattern by light blue arrows.

Shading Sheet Patterns may be employed on photographs to lighten certain portions and to emphasize definite parts of the picture.

### Illuminated Initial Shading Effects

In the following we briefly describe the shading exhibits of the illuminated initial B. Figure A shows the line copy. Figure B the shading sheet pattern. Figure C the shading sheet over copy, partially completed. Figure D shows the finished effect as reproduced. At this point it is well to consider one definite advantage of shading sheets which is an opportunity to visualize the completed effect before any further reproduction expenses are incurred. Figure E shows the shading sheet as it may be reproduced separately for color printing.

The bottom portion of the following page shows a continuation of the shading effects of this illustration. The right and left designs show effects secured by white shading sheet designs and the main characteristics of the center panel is the overlapping shading sheet border.

Directly above these three panels we illustrate a reproduction of some of the more favored shading sheet patterns consisting of lines, dots, cross-hatching and splatter effects. These as well as hundreds of others may be secured in various pattern densities.

### Permanent Shading Sheet Paragraphs

Shading Sheets are employed by the subtraction method, that is portions not needed on the overlap are removed by rubbing off the design with a sharpened piece of wood or greaseless stylus. Simply tip on piece of the shading sheet to cover portion desired and rub off the pattern of sheet not required until you secure the desired effect.

The outstanding advantage is reducing production costs without sacrificing quality or increase in the time element.

The selected designs may be first tested by placing them over the drawing without damaging the drawing or sheet. The pattern or patterns decided upon are at-





tached over the drawing with light colorless rubber cement. The best effects are assured by keeping the rubber cement base outside of the drawing lines.

An added advantage is secured in "graying" large solid black portions thereby giving a better printing surface and reducing the quantity of ink which is an item when large runs are required. Benday effects in both black and white may be placed with shading sheets on a single drawing.

Black Designs are used principally for adding Half-Tone, Benday and Character effects over white space or white portions of copy. The black designs will not effect the black portions of the copy when making line negatives.

Black Designs are also used for contact negatives and creating of color effects.

#### **White Designs Subtract Color**

White designs are used principally for incorporating Benday, Half-Tone and character effects in black portions of copy. The white designs will not effect white space of copy photographically when making line negatives. It is only



necessary to remove white designs where you wish black to come through as it is only necessary to remove black designs where you wish the white to come through.

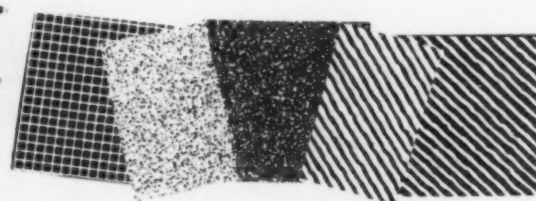
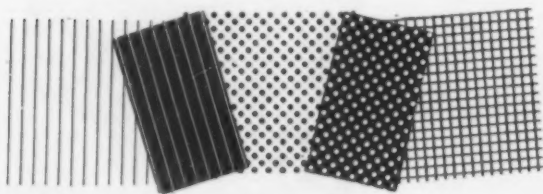
It is practical to overlap black designs and by turning them to different angles create unlimited different and original effects.

White sheets may also be overlapped creating new endless effects. Black sheet may be placed over white sheet and white sheet may be placed over black sheet creating still more different effects.

It is practical to overlap up to four sheets but as a rule the overlapping of any two is sufficient to create all desired effects, and there is less danger of trouble in photographing where smooth even contact and uniform lighting is essential.

#### **Shading Sheet Treatments**

In the following are brief comments on the various shading sheet treatments illustrated herewith: The first seven letters of an open faced alphabet shows seven distinctive designs utilizing the same sheet pattern.







The building design was treated with a line pattern in order to modify the many dark lines shown in the original.

The children's silhouette and ladies' head illustrates shading sheets used to tone down the color value and the five circles on this page each show a different shading sheet pattern.

The drawing with the word "Seasonable" shows the possibilities of adding color to increase interest.

Nine of the illustrations on this page show the use of the dot treatment in various forms of density.

The final page under this heading shows eight drawings that offer opportunities for study on the further use of shading sheets.

Note the upper left illustration shows the use of light dots for securing the atmosphere of summer clothing while the lower left with greater density of dots bespeaks of business suits.

Two entirely different and distinctive treatments of shirt illustrations are shown: first, the one on work shirts with a treatment that symbolizes wear, and second the silhouette effect which pictures shirts for more dressy use.

The Anniversary sale poster illustrates two tones of dots used to add contrast to the completed design. This drawing demonstrates what is meant by designing the picture with the use of the Shading Sheet Patterns in mind.

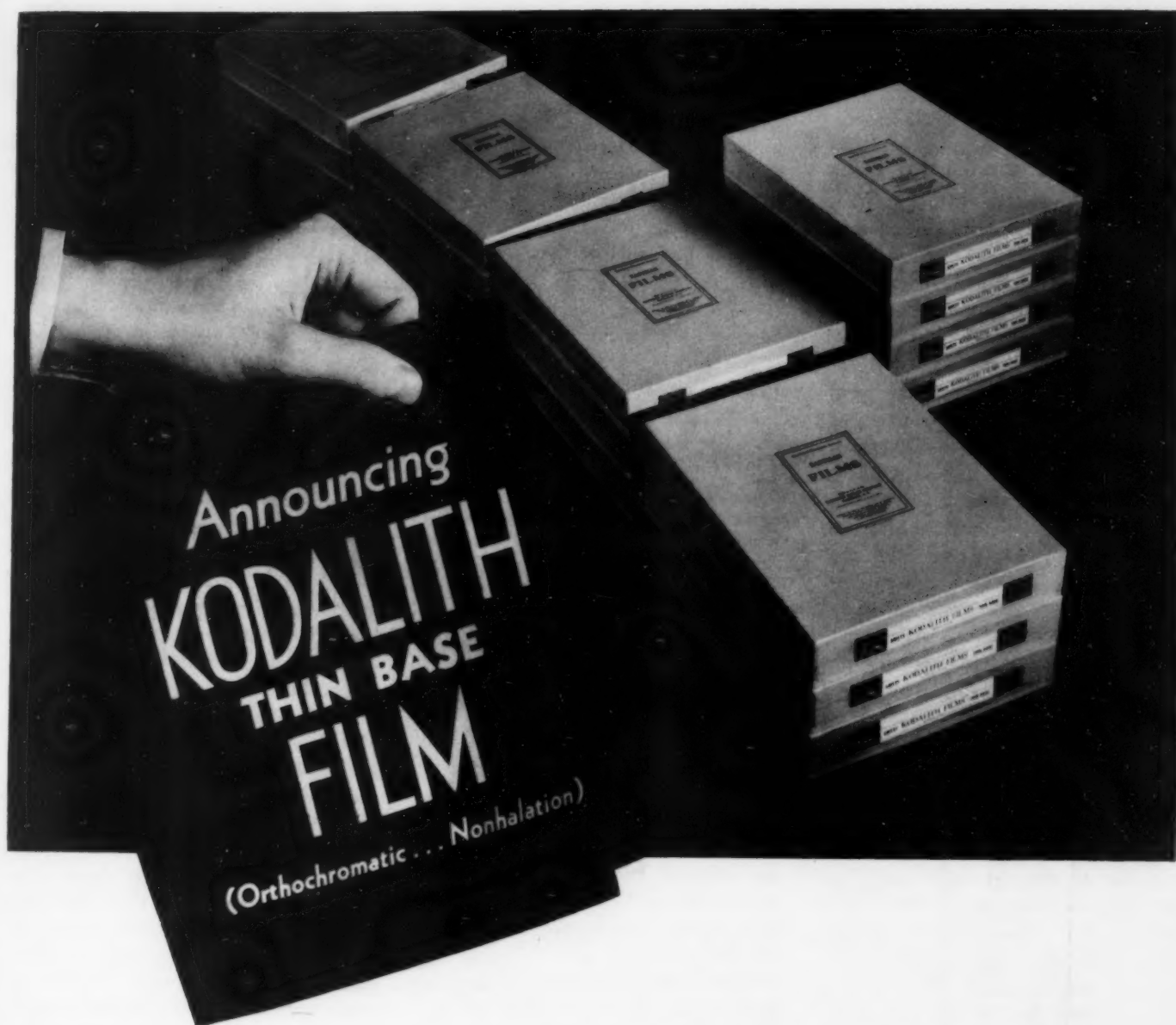




The upper right shows a white dot shading sheet used to secure an unusually effective design.

The author is greatly indebted to Mr. Albert R. Bourges of the Bourges Service, Inc., 220 East 22nd St., New York City, for his splendid cooperation in completing this instructive article on shading sheet uses for offset printing and the supplying of the shading sheet patterns from his many improved and approved designs.





**T**HE thin base of this new film—about .003 inch—enables you to print by contact with either side up.

And that is only one of the qualities that recommend Kodalith Thin Base Film. To the many jobs for which it is suitable it brings

the same high contrast and dependable uniformity for which other Kodalith Films are known. It is fully orthochromatic, and has an effective antihalation backing.

Kodalith Thin Base Film is a modern film for modern-minded graphic-arts workers. Investigate its possibilities—give it a thorough trial as soon as possible. Prices of cut sheets and rolls are the same as those of other Kodalith Films.

**EASTMAN KODAK CO., Graphic Arts Dept., Rochester, N. Y.**



THE estimating department is a very important one in any photo-offset plant. In the April issue of *The Photo-Lithographer* we mentioned some of the reasons we think make it so. But incidents in the past few days, in visiting a number of offset plants, have made the writer think that some owners are allowing vital functions to be performed in that department that should be done elsewhere. I refer specifically to the practice of allowing an estimator to do any form of price cutting. In other words, it is poor policy to let the estimator establish anything but a standard price. I mean one that is arrived at by using regular rates, allowing normal times for each operation, and following standard practices of manufacture.

There is no doubt the salesman would still come to the estimator with the old story, "Bill, price this one close to the vest. Keep the old price just as close as you can make it. I have been trying for months to get something from this bird, and now is my chance. He is a price buyer, and we will have to be just right to get in. We will make it up on the next job, but we must get this one." The estimator can listen with a sympathetic ear to any stories like this one and must make any suggestions he can in layout, paper, size, or other details to make the job come to a low figure. But when he figures it out he should cut no corners on rates, or time allowances. The price he gives the salesman should be the lowest he can possibly make without sacrificing anything in rates. Why do it this way?

Well, first of all, the estimator has no way of knowing all there is to know about all the customers or prospective customers a house may have. The sales manager is the man who should know these things. From past experience he can know, or judge how much business the proposed customer has, how worthwhile it is, about how good the credit is, and how much the house might sacrifice in profit to do work for this customer. He is also the man who can really judge whether the salesman is just being over anxious to get an order, or whether the price must

## Estimating

By LATHAM B. MYERS



*Estimators get like this sometimes when they are expected to do both their own work and the work of the sales manager in cutting prices to suit some special circumstance. Estimators should not become involved in matters that are in the province of the sales manager, suggests Mr. Myers.*

be rock bottom. If the salesman should bring an estimate to him, and ask him to allow the house to take it at a lower figure than the one shown, he can know there is a certain percentage of profit allowed which may be reduced at his discretion and responsibility. The estimator will have reduced the layout to its most economical basis, will be using the cheapest paper consistent with good performance, and will have the job planned in the most economical way. So now if the sales manager cuts the price, he knows about the limits he can allow. Is this a sound procedure to follow; will it satisfy the sales force that they are getting the right prices, ones that they can sell? The only definite answer available, aside from an analysis of the facts, is that many of the most successful firms, (from the standpoint of profit) pursue this procedure.

Does this put the sales manager on the spot? No, not necessarily. It will make him a very busy man, one very much in demand in a market such as we are now in. He is responsible for the actions of his salesmen; and one of their most common actions is to clamor for "bargain prices." If he passes on their final prices he will soon know who is the "Chiseler,"

and who is the man who sells his product, his house, his service at a price on which the firm can make a profit. It puts the responsibility for price cutting, or for loss from price cutting squarely up to one man. If this responsibility is too great, there could only be one other in the firm who could assume it, and that person would have to be the owner himself.

Let's see what happens in other plants that do not follow the above suggested scheme. The salesman makes his plea to the estimator who "goes to work" on the price, and cuts every possible bit of safety margin out of the job. Plate prices are figured at the cheapest possible rate; press rates are shaved to the bottom; the "overs" or allowance of paper for spoilage on press is cut to the limit; perhaps even the handling charge on outside purchases is pared down. The salesman checks over the price, and finds he still is above what he believes the job will bring, so he goes to the sales manager who hears the same plea. Perhaps the sales manager allows a small further cut, for he will see the price is close. When the job comes in maybe there is a little bit of extra work that someone should have known about. The firm must do it to keep the customer satisfied. Now normally, this little bit of extra work wouldn't hurt; but when the price is pared down so very close, it may use up the last little bit of profit in the job. Now if anything else happens the job will be done at a loss.

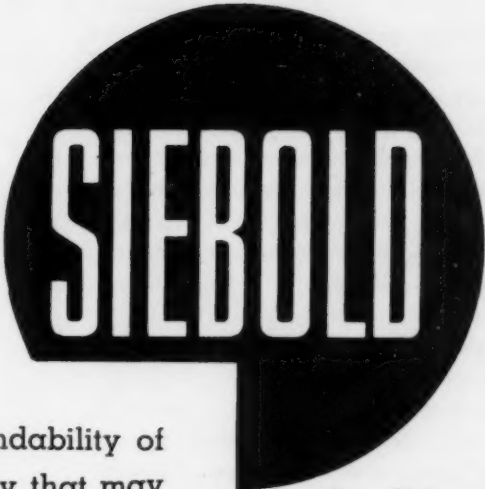
Considered on a cost analysis sheet, many things may happen on a job of this sort. A couple of negatives had to be re-shot; the shop was busy and had to work a little over-time to get it out on time; the press spoilage was higher than was anticipated and more paper was used from the stock room, on which the company took the loss. Each item added its burden to the final total. When the cost analysis sheet reaches the boss, he is furious and starts to find out "why." Very seldom does the whole story come out, and one fellow is usually the goat. How much more simple this story of loss would have been had the

# Assurance That Counts!

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estimator given a regular price with no cutting done in it. The sales manager gave it what he considered the right amount of reduction. If there was a loss, it wouldn't happen many times, you may be sure.

Many plant owners ponder over "what is the right mark-up to put on outside purchases?" Well, it is a question that has no rule-of-thumb answer. The mark-up or handling charge depends very much on the type of work the plant does; on the ratio of inside work in dollars and cents to the outside purchases in dollars and cents; and on the part of the handling charge allowed the salesman in commission. It is one of those problems each plant must work out for itself. The following remarks may be helpful to the manager in considering his particular setup.

First, how does the type of work handled affect the mark-up? There is hardly an offset job done that does not have the cost of an outside purchase in it. Paper, binding, mounting, varnishing, die-cutting, embossing, containers, mailing tubes, cartons, composition, and art work are some of the common things the photo-offset printer must buy to help him deliver the job to his customer complete. And most customers want jobs delivered complete, so that they will not have to worry about details of any kind after the copy is completed and put in production. The customer wants to feel that once he has OK'd a proof he can forget about the job until he sees a final sheet of it. Then he would like it delivered to a given destination, and his responsibility ended. He wants someone to handle his job who will have all the various finishing operations, or any complex deliveries, taken care of for him. For this service he is willing to pay a price, and that price depends entirely upon how much service is given. Let's take an illustration to see how much the printer should have for his trouble.

A good illustration is a display job. The price figures five hundred dollars. Of this amount one hundred dollars is all that is to be spent in the photo-offset plant for plates and press work. The balance of the four hundred dollars goes to outside houses to have



—that's one fundamental principle of photo-lithography. Another just-as-fundamental principle applies to the photo-lithographer's business management. It is this: Estimating and selling don't mix as activities of the personnel of the estimating department. Estimates should be prepared on the uniform basis of known cost factors—not according to varying degrees of sales resistance, as reported by the salesmen.

the sheets mounted, die cut, eased, and inserted in containers. Let us assume the mark-up on the four hundred dollars is thirty per cent which is one hundred and twenty dollars, then:

\$100.00—Shop work.  
400.00—Outside purchases.  
120.00—Handling charge at 30% basis.

\$620.00—Billing price to customer.

But the expenses of the job are:

\$100.00 Shop work.  
400.00 Outside purchases.  
62.00 Commission to the salesman.  
\$562.00 Total costs of job.  
\$620.00 Billing price to customer.  
562.00 Cost of manufacture.  
\$ 58.00 Actual profit on a 30% mark-up.

What will the photo-offset lithographer have done to earn this \$58.00? He will have assumed the responsibility for all the outside work done by another firm, or firms, as to quality, spoilage, promptness of delivery. He will have given orders and instructions to each house having a part of this outside work. He will have called them and followed them up to be sure the delivery would be on time. But most important, he will have financed the customer's job to the extent of four hundred dollars from his own pocket. This financing may be in the form of credit. But the lithographer will have to pay these

bills in thirty days, and if his customer does not pay him in less than thirty days, the financing will cease to be a matter of credit, and he will actually have to pay the four hundred dollars and collect from the customer later. You will agree the \$58.00 profit much harder earned this way, than it would be had the lithographer made a profit from plate and press work. It is by all means a less certain profit. On this basis a 30% mark-up is very reasonable for this type of work.

Let us now consider another type of work; one with less outside purchases—say, for instance, a pamphlet job, priced at \$500.00. The only outside purchases on this job are composition and paper, which total \$100.00. The mark-up here should be around 20% for the situation is reversed over the previous illustration.

There is \$400.00 worth of work to be done in the lithographer's own shop, on which he can show a normal profit. This profit will help to make it worthwhile to finance the \$100.00 worth of outside purchases, and take the risks involved therein. The crux of the matter is, that work to be handled profitably must be under the lithographer's supervision. Outside purchases should keep the photo-offset lithographer's own plant busy, his presses turning, his men working. When these purchases bring in a great deal of shop work, without much outside buying, the mark-up can be small. When the shop work they bring in is little, a fair handling may be anywhere up to 50%.



## COLOR PHOTOGRAPH VS. PAINTING

THE Young Lithographers Association, New York, enjoyed an unusually stimulating April meeting, because of talks on the subject of color photography versus painting, given by three experts—Gordon Aymar, Art Director of Compton Advertising, Inc., New York; Anton Bruehl, famous photographer of New York; and W. N. Misuraca, Director of Lithography, National Can Corporation, New York.

The talks by Messrs. Aymar and Bruehl follow. Because of space limitations, Mr. Misuraca's talk will appear in the June issue.

### GORDON AYMAR HAS HIS SAY:

This is not a good day for me to discuss color photography! This morning an advertiser required an ad in a great hurry to run in a color rotogravure publication. There was not enough time to permit the preparation of new paintings or photographs. We began to search through our files. Finally we dug out a transparency made by a well-known photographer, thinking the day had been saved. A glance at this transparency, which had been prepared two years ago, disclosed that the top half was about 1/32" to 1/16" off register—although the lower half was apparently all right. But of course it was the upper half that we were anxious to use. We then hunted around for the negatives. These the photographer had thrown away. So we again started to hunt for the other transparencies, only to find in each case that the negatives had been disposed of. Tonight we are using a set of progressive proofs that were made for a magazine ad, reproducing these proofs. This is no little job for it involves patching up a mortise which had been required on the original magazine job. Perhaps, therefore, this was not the day for me to discuss photography. What I would have welcomed most was a nice painting, easily preserved and non-shrinking, from which to make a plate!

I'm going to mention tonight—from the buyer's point of view—a

### Experts Aymar and Bruehl Rival Candid Camera in Presenting Candid Word Pictures of Situations on Two Sides of an Important Subject

few of the reasons why we use color photography, which you probably all know; and a few of the reasons why we use paintings, which you may have forgotten.

While I don't think that there is any particular rush to buy paintings, certainly if you sit down and figure it out, a trend toward paintings seems evident. Compare one of the magazines of this month with one of a few years ago; you will find, in proportion, more paintings today than was the case a little while ago. We knew that this was bound to come. A lot of photographs were incorrectly used, because everybody was taking and using photographs.

### ADVANTAGES OF PAINTINGS

Here are some of the reasons why we see an advantage in using paintings now and then. I am expressing not my own opinion alone, but that of the account executive, the copywriters, and perhaps a reflection from the client. It is of course incomprehensible to the average photographer why there are paintings in a magazine at all.

First, you will find clearer, fresher color all over a good painting. You can pick out a few color photographs that have in them colors that are as fresh and clear. On the other hand, it is easier to get a painting (water color), which undoubtedly will show clearer, fresher color.

Another reason is this: You may want a small still life, such as a food or a subject of that kind, in magazine work. I have seen some good color photographs reduced down to small spots 1 x 3/4 of an inch, let us say; but on the whole, I have seen more good painted still lifes in miniature size than I have seen colored photographs.

There is another factor that enters here for small snapshots. You have the basic price limitation on color photographs. You don't have that handicap with still life paintings.

Another reason for using the artist rather than the photographer would be the vogue for caricature. See the volume of comic strips. That's one of the most interesting phases that's come over advertising, and one of the advantages is that it can be so condensed. You can get material in a comic strip that you used to spread over a full page in newspapers. Color photography is not exactly suited for it; it hasn't the freedom and flexibility; it can't be done as fast. If you want a six panel color strip, an artist can produce it six times as fast as a color photographer. You have the advantage of any degree of exaggeration in caricature. Incidentally, I must confess, I stood right over there (I don't know how many years ago it was) but it was when the first balloons began to appear in the mouths of characters in ads. I noticed that four ads in one issue had balloons in the mouths of the men and women, and I thought that with this repetition, the ads were looking alike. I predicted that balloons would go out pretty soon!

Now take the most elaborate scene as an example of the advantage of paintings. All you have to do is call up an artist and say "Paint me a Brazilian moonlight scene with a mountain in the background and a six piece orchestra of native instruments,"—and he can do it without any difficulty. It is tougher with photographing.

Also, there enters the matter of expense. If you are going to get into something complicated, you have your charges for that work indicated on your bill. The artist goes to his scrap and pulls out something that was done about 20 years ago. It is just as good for him.

Corrections are not as easy with color photography. Carbro prints can be air brushed and painted over but the original photograph has a tendency to come through.



Gordon Aymar

#### STUNTS WITH TRANSPARENCIES

You have all done stunts with transparencies. I remember an example of that, where we had to make a magazine ad for an automobile account. I sent a photographer to Detroit. Perhaps I didn't pick the right photographer. We wanted to have a great crowd cheering in the bleachers, and this wonderful new car speeding by the grandstand. I suggested using the factory employees after hours, thereby saving all model fees. Finally the transparency came through. Well, it looked like a handful of fellows scattered around; it certainly didn't look like a mob rocking the stands and cheering wildly for this car that was standing so still in front of them. We communicated with the engraver and instructed him to double the crowd. We took the original crowd and duplicated it—changed a few hats and neckties on the people who were shown twice—we darkened some men's hats, we did something to the girls' hats. The perspective was a little bit screwy, but I can tell you right now that it looked like a whale of a crowd—and we never received a letter from anyone, and no one ever knew that it was just a cock-eyed patch-up job. It is more difficult than changing a painting, however.

Another reason an art director selects a painting is because it is so swell to get away from a definite shape. Most silhouetted or vignetted color photographs look pretty cheap.



Anton Bruehl

With a painting you have complete freedom to compose it in any shape you wish.

An art director has to face the total cost of art work per page. Suppose you want to run a lot of color photographic strips. That will run into money. You can use Kodachrome, and perhaps you can get it cheaper, because it doesn't require all the regular expense; but to my way of thinking, they still have some distance to go in perfecting the color. If you want to be cynical about it, you might say about a Kodachrome job of 6 photographs on a page "How many people out of a thousand are going to notice the difference between that job and a fine job made with a color camera?" You can look at it that way—and the client often does.

I thought I was through with having color retouching on black and white photos, and I dropped it completely for a few years—but there are cases where you have a lot of junk pushed into pages where it is just good common sense to have color retouches do the work.

I think the first job of color photography I ever bought was a Persian rug. It was taken about 1922. It was done to get around color retouching which everyone had used up to that time.

I remember one of the first figure jobs I bought. We were doing a car card, and the few color photographs that I had seen used, had brown bean

soup for shadows. So I figured we had better plan something with flat lighting. We would have the woman in a red negligee and with black hair, and we would stay away from the shadows with just enough to detach the figure from the blue blackground. They exposed each negative for 10 seconds and the poor girl had to remain there without moving all that time.

I have watched closely the introduction of color photographs of babies, because Procter & Gamble has used so many of them. The first photographer I used brought in the job with the remark, "I am sorry, I have a nice picture of the background but the baby walked away every time I tried to take it." Then the flashbulb came along and made a lot of things possible.

#### THE PLUS SIDE OF COLOR PHOTOGRAPHY

On the plus side of color photography, I don't have to say much. I probably have bought as much color photography as any one in town. All this talk about paintings was partly for Mr. Bruehl's benefit, and partly because I thought it was well to drag out in the open some of the things that color photographers should be thinking about. I would say that the first thing that color photography has is realism. The second thing is realism—and the third is realism. And after that you come to the speed of production—comparatively speak-

ing. Maybe they will speed that up the way they have done with printing ink when they play the gas flame on it.

Just before I forget it—I would like to say that there ought to be a law which makes it compulsory for several photographers to have a tracing of the layout down on the ground glass before any art director or client arrives, because I have spent hours waiting while someone had to get someone to get someone to call someone to put the tracing on the ground glass.

The next thing you have in color photography is a control of the subject and of accessories. With color photography you can pick your models and be fairly sure of what you are going to get in the final job. That is not true of a painting.

About two weeks ago, a client came to attend the photographing of a job I was working on, and was entranced by the looks of a certain girl model. When the job came back, however (he had to show it to some other people) the photograph was accompanied by the following comment, "We like everything but the girl." He had been all aglow about her, seeing her in the flesh, but his associates were not so sure.

You cannot be entirely sure that a model will always look the same. You remember the story about Police Headquarters—they sent out photographs showing six different views of a criminal. That night they received a telegram from a nearby suburb "Have arrested five of the men and expect to have the sixth tomorrow."

In color photography, you have the advantage that you can see the picture before it is taken—providing you can stand on your ear and look at it upside down.

Of course, the main reason for the great vogue of color photography comes back to that business of realism—and I regret to say that even a mediocre photograph is so much better than a painting in this respect. I regret it because I don't like to feel that anybody is going to sit back and be satisfied and not push ahead. There come to my office swarms of salesmen from photographers and from studios, and they all

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begin with, "A new development in color photography" or "A new method"; then the same old stuff comes out. But in spite of all that, I think that anybody can see what tremendous strides have been taken both technically and from an artistic point of view. It is obvious to all, what sincere photographers, with genuine ideals of craftsmanship and ingenuity—just as high as any painter—have done and can do for the art of color photography—and I am glad to say that in my opinion, Mr. Bruehl is certainly among those leaders.

#### **Anton Bruehl Takes Issue with Mr. Aymer:**

Mr. Winship gave me a list of the subjects I should try to cover tonight but I realize after listening to Mr. Aymer, I should have come prepared to sell color photography. It seems to me that Mr. Aymer is comparing the finest art work available with the worst type of photography. I deplore the bad photography used probably more than any one else and often feel ashamed of my profession, but I maintain there are many able photographers capable of turning out fine color work and I blame the advertising agencies and not the photographers for the inferior color pages in current magazines.

For example, I fail to see any reason, outside of a very few instances, why Kodachrome, Dufay, Finley, Agfa and other similar processes, the reproduction of which largely depends on the skill of the lithographer or engraver, are used so extensively in advertising. The only reason I can find for this is a saving of money, but I never could understand why a saving of a few dollars matters very much on a \$10,000.00 printed page. We hope, some day soon, these processes will be improved to such a point that they can be used successfully for advertising. When this happens, a photographer's ability will not depend upon his technical staff but upon his own ability as an artist. However, at the present time there are many photographers available with processes, technical

skill and equipment to make color photographs that are really capable of fine reproductions.

#### **WHY SOME PHOTOGRAPHY IS UNINSPIRED**

Mr. Aymer objected strenuously to the time wasted in photographic studios while the photographer projected the "lucies" on his ground glass. This is one of the things that I think all photographers wish they did not have to contend with and one of the reasons why a lot of photography is uninspired. I may be wrong, but I don't think many of the greater artists would conform to a layout as accurately as we are very often asked to do. We get an illustration with balloons, cartouches, and strips of copy spread through the layout and we are asked to push human models into the remaining spaces. We have to prop a model's hand so that it rests on a cartouch whether or not that is the natural position. It is evident that by the time the photograph is ready to be made there is no spontaneity left in the photographer or model.

Mr. Aymer jokingly mentioned that photographers ought to do something about having their images right side up in the ground glass for the client's inspection. Well, for such clients we now have cameras that show the image right side up.

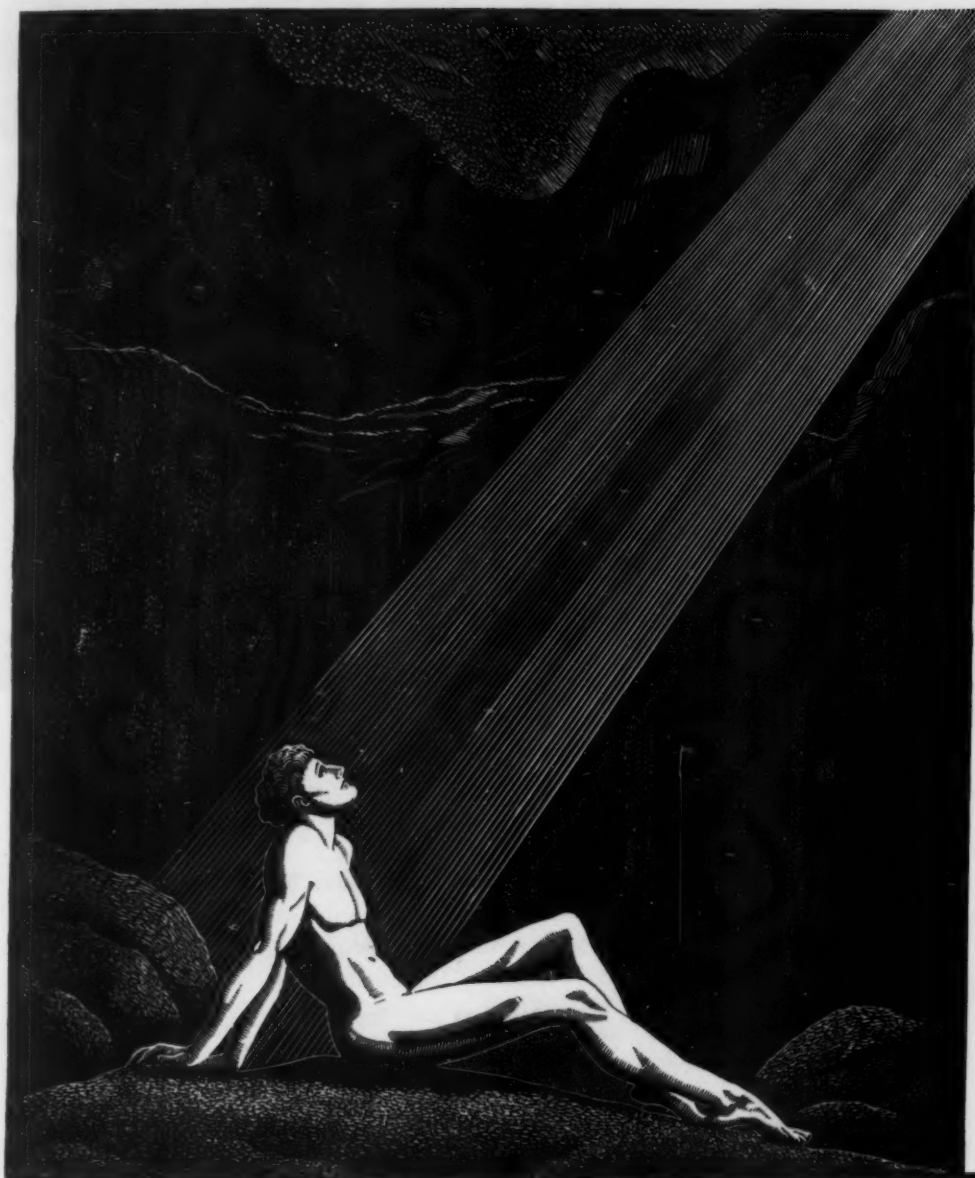
He also made the statement that retouching on carbros, while it looked all right to the eye, showed up very definitely in front of the engraver's camera. I think this is only true in isolated cases; if a carbro is varnished so that the surface is uniform over the entire print, engravers have told me that retouching is not picked up by their cameras. I might say that I believe the greatest trouble engravers have had in this respect has been with black and white photographs retouched in color. Also while I am on the subject I would like to discuss the relative merits of the glossy color print versus the mat print or, for that matter, the lithograph printed on coated stock versus the lithograph on mat stock. During dinner, I was shown some lithography that I mistook for letterpress. These were

printed on good coated stock and up to this time the only fine example of color lithography I have ever seen. All our color prints are finished with a high gloss. We do this to eliminate the surface reflection that is inherent in any mat print and which tends to decrease the total range of the photograph. We have always delivered a glossy black and white print to our clients and also for exhibition purposes because of the same reason, that is, the increased brilliancy of the glossy print. Of course, I realize the reason why most lithography is printed on mat paper is because that process is the only available one for that paper.

I have to agree with Mr. Aymer that color photographers cannot compete with the artist in cartoon strip advertising. The expense is prohibitive. It is just as difficult for a photographer to make a photograph that is reproduced 1" x 1" as it is for one that is reproduced full page. Very often the same amount of preparatory work in building sets, collecting accessories, etc., is necessary for the small photograph as it is for the large.

Mr. Aymer did have a good word for color photography. He said the only advantage we had over painting was realism. Any photograph taken today with modern equipment, cameras, exposure meters, films, printing processes, etc., has realism. Even the rankest amateur can produce a realistic photograph. I think that there are quite a few photographers who have more to offer the advertiser than just realism. We very often supply the basic idea to illustrate a product. We design sets, we select colors to paint the sets, we sometimes are allowed to select models, we take care of their make-up, we select their clothes, and we finally light and direct them. And I feel certain that among our ranks there are some who really have a sincere feeling for color, lighting and composition.

This sounds like a battle between the photographer and the art director but I think my good friend, Mr. Aymer, deliberately baited me so that I would give my views on the age old question of brush versus the camera.



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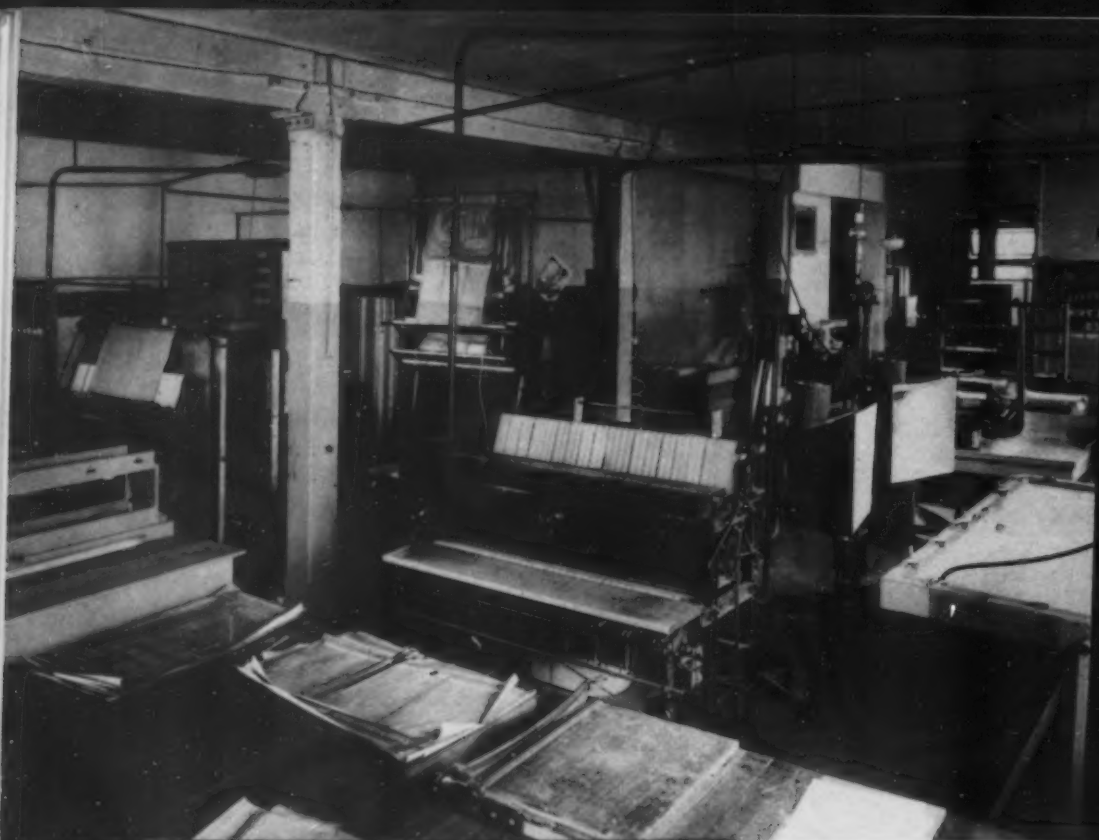
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October 19, 1957

The Haloid Company  
222 Kearny Street,  
San Francisco, California

Attention: Mr. A. H. Muhl.

Gentlemen:

In the past two years we have been using your Lithaloid paper and have been very pleased with the result. We have been particularly pleased with your product for the reason that we have less spotting to do on negatives with your paper than we have had on other papers. Furthermore, in our opinion, negatives have been sharper.

Our comments on your Lithaloid paper are based principally on negatives we make for the purpose of making Photo-Litho Offset-printing Reproductions.

We are pleased to give you our endorsement.

Very truly yours,

STRECKER BLUE PRINT AND PHOTO COPYING CO.

*A. D. Strecker*  
A. D. Strecker

ADD:AR

"Negatives have been *sharper*"  
writes A. D. Strecker, San Francisco

*Sharpness in negatives.* That's the most important factor desired by lithographers.

In Mr. Strecker's letter, reproduced at the left, he states: "In the past two years we have been using Lithaloid Paper and have been very pleased with the result. We have been particularly pleased with your product for the reason that we have less spotting to do on negatives with your paper. Furthermore, in our opinion, negatives have been sharper."

Every job begins with the negative. That's why good negatives are essential to a fine quality finished job. Lithaloid negatives are sharp and contrasty. They develop to a uniform density in from 1½ to 2 minutes with fine opaqueness and minimum of pinholes. They speed up production and are dependable on the tough as well as the routine jobs. But don't take our word alone. Set your own test standards in your own plant. Send for free test outfit today.

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Chicago Office.....608 So. Dearborn St.  
Detroit Office.....144 Lafayette Blvd.  
Los Angeles Office.....714 So. Hill St.

New York Office.....330 West 42nd St.  
Philadelphia Office.....1015 Chestnut St.  
San Francisco Office.....222 Kearny St.  
Washington Office.....15th and K Sts. N.W.

Canadian Distributors, Rectigraph Co. of Canada, Ltd., Toronto  
Texas and Oklahoma Distributor, Jno. J. Johnson  
1912 St. Paul St., Dallas, Texas

**LITHALOID**  
**PAPER NEGATIVES**





# THE SELLING PARADE

(REGISTERED)

BY CHARLES B. ROTH

HE'S OUR  
CUSTOMER, NOW!



MANY salesmen proudly boast that they're good mixers, but there is such a thing as carrying mixing too far. A Pacific Coast sales executive has a little story about one of his men which is as good an illustration as I know.

This salesman was the boy who knew all the social answers. He was at home with everybody and could carry a conversation in any direction.

The boss sent him up north to make an important contact, serene in his faith that Harry would do the job. And what encouraging reports came back! "Getting on very friendly terms with Barker," one read. Later: "He's our meat. Played golf with him today." Later still: "Barker and I are on a first-name basis. I'm Harry to him. He's Bill to me."

But no orders arrived. The boss pondered. He wrote the salesman. Mollifying reports of social conquest came back. "Orders will come later. I'm playing him right," concluded one message. Weeks passed. No orders.

Like a good manager, the boss himself called upon the prospect. He told who he was. He mentioned his salesman by name.

"Oh, is he one of your men?" exclaimed the prospect. "What a nice fellow! I've often wondered what firm he was with."

ALMOST every psychologist will give you a long list of motives which cause people to buy. You can forget these lists if you will remember that 99 per cent of the sales transactions in your business come about as a result of the appeal to three simple motives. These motives are: VANITY, CUPIDITY and FEAR.

The place which vanity plays in everyone's life—your own included—you of course know. All persons are vain, men included. So in your selling play on vanity. It makes sales.

Cupidity is merely the love of money or the desire for gain. We all hope to gain something every time we buy. It may be actual money. It may be gain of utility or use. It may be gain of satisfaction. Unless we see gain in the deal for us we seldom buy. Dollar-mark your sales presentations and watch orders rise.

From the cradle to the grave, every single one of us fears something. Perhaps it is the unknown, or poverty, or physical pain, or loss in some of its myriad forms. No matter. Shrewd salesmen capitalize on this fear complex. Fear is an even stronger motive than gain.

Example: Chauncey Depew once said that if you were to awaken him at three o'clock in the morning to tell him that by going with you to a certain place he would make \$100, he'd kick you downstairs and go back to sleep. But, said he, if you were to awaken him with the news that by going to the same place he would avoid the loss of \$100, he'd tell you: "Wait till I get my pants on," and go right along with you.

THE salesman was getting his lunch, but it was a powerful long time in coming to him. A waitress approached and asked, "Have you given your order?" "I thought I had," weakly confessed the salesman. "But maybe you had better change it to an entreaty."

IF there's anything a high-minded and sincere salesman resents it is the buffers or shock absorbers with which many men surround themselves. Usually ill-mannered office boys or supercilious office girls, these supernumeraries believe it is their job to keep you out, no matter who you are.

You enter, tell the boy whom you want to see. Does he know you? Does he expect you? Have you an appointment? What do you want to see him about?

If you answer that last question you're lost, because the buffer goes in to see his chief and in his own words repeats what you have told him. You can be sure that he never makes it more attractive. He usually garbles it so badly that the customer's natural reaction is to say he's not interested at all in seeing you.

Tom Beck, now head of *Collier's*, and a master salesman if there ever was one, had a way of getting past that barrier.

He approached the railing in a brisk, businesslike way and told the guardian of the balustrade whom he wanted.

"What do you want to see Mr. Oil about?" asked the boy.

"Courtesy call!" snapped Mr. Beck.

That got the boy. He couldn't interpret it in his own words. He had to tell the boss that there was a fellow outside making a courtesy call.

After Mr. Beck got in he always made the call what he said it was going to be—strictly a courtesy call. But he utilized the opening he had gained to come back later. Then he was admitted without difficulty.





# COLOR in Advertising

The following article on color in advertising has been prepared by The Photo-Lithographer to help photo-lithographers apply to their work principles of color that have been found especially effective in encouraging buying impulses. . . . The three hand-applied water colors on this page and the design itself represent the work of Reba Martin, Inc., New York, who specializes in the application of water colors to black-and-white printed work.

COLOR is everywhere. It affects everyone. A world without color would be a world without reason, devoid completely of all inspiration. Objects having only size, form, and texture, but lacking color, would be grotesque, unrecognizable by most people. So . . . color *is* important, both in nature and as produced by man's artfulness. It is worthy of careful study not only by those who want to know more about color "for art's sake," but also by all who are called upon almost daily to use color in advertising and the graphic arts.

Color has many phases. There is the chemistry of color, involving many matters intelligible only to the chemist. There is color as light, and in that sense the subject is, if anything, less understandable to laymen, and even to skilled craftsmen in the graphic arts. Then, there is color as a visual sensation involving many subtle and psychological appeals, natural, racial and religious traditions.

No wonder, then, that many heavy volumes have been written, and are still being written, on this vast subject of color, and that years of study

are devoted by conscientious art students before they obtain enough knowledge of this very important universal phenomenon to use it skillfully in commercial practice.

The more one reads about color, the greater becomes the temptation to accept it as one of the pleasant things in life, and not to take too seriously its scientific aspects.

This article, therefore, will be concerned mainly with color just as one of the most important stimuli to emotional and other psychological responses in advertising and other commercial uses. Thus, without involving himself in confusingly abstract and academic considerations, the author may be able to give fellow craftsmen and salesmen some pointers on the practical use of color in advertising and printing, regardless of whether it is done by letterpress, intaglio, planographic, or other processes.

Color considered commercially is a sensation that can be appreciated by everyone, although too few who have to work with it are able to evaluate it accurately in terms of

just how it works to enhance the worth of a piece of printed or advertising matter.

Even within the comparatively narrow limits of the subject of color and its effects when applied to advertising and commercial printing, many rules and formulas have been evolved. Some are elemental and must be understood if color is to be used most effectively. Others are empirical and are based on isolated cases of favorable response. These had better be ignored; a bit of horse-sense in their place will be of much greater help to the advertising man, the salesman and the craftsman.

It is well to keep in mind that color as an effect in advertising and printing is not all system or rule. Innumerable successful applications have been made with little regard for the letter of the laws of color as applied in art and science.

The person who steepes himself too long in textbooks on color, not only will be confronted by distracting contradictory theories, but it is likely that he will develop a topsy-turvy outlook on the subject. He



## Mr. Chrysler's New Car

FIVE thousand dollars for the finest automobile on wheels; when it arrived they had to hitch a team to it and tow it home. Mr. Chrysler didn't know how to drive! He had to learn for himself.

Today, when you buy, see to it that nothing is taken for granted. *Taking things for granted is costly and inefficient.* That's why Wire-O Binding salesmen are trained to help you build sales appeal into catalogs and display books. They know that you'll do a better selling job KNOWING some of the less obvious, but none the less important, features of Wire-O BEFORE the planning begins. Wire-O in nickel or in color is a powerful means of expression; it is more than a mechanical method of holding sheets together that lie flat when opened.

You get maximum reader attention when your sales stimulator is built around Wire-O. That's why Wire-O licensees show *printers and paper men as well as their customers*, how products can be made to *live* when a display book is *built around Wire-O*.

We sincerely believe that you will be interested in seeing how simple it is to put that extra sales value into catalogs and price books which places them in the "*above the average*" class. Whether you have an immediate use for Wire-O Binding or not, call in your nearest Wire-O Licensee. He is a man trained to help you merchandise.

Published in the interests of its licensees by

TRUSSELL MANUFACTURING COMPANY  
POUGHKEEPSIE, NEW YORK

BE SURE TO LOOK CAREFULLY AT WIRE-O BINDING... IT IS EXCEPTIONAL IN ITS UNUSUAL ADAPTABILITY... CALL IN YOUR WIRE-O SALESMAN

\*Patents  
Pending

WIRE-O BINDING CO.  
200 VARICK ST., NEW YORK  
WIRE-O BINDING CO.  
732 W. VAN BUREN ST., CHICAGO  
PLIMPTON MFG. CO.  
HARTFORD, CONN.  
P. P. KELLOGG & CO.  
SPRINGFIELD, MASS.  
EASTERN TABLET CORP.  
ALBANY, N. Y.  
OPTIC BINDERY  
BALTIMORE, MD.  
PHILADELPHIA BINDERY, INC.  
PHILADELPHIA, PA.  
WIRE-O BINDING DIV., PHILADELPHIA  
BINDERY, INC.  
PITTSBURGH, PA.  
W. J. GAGE & CO.  
TORONTO, ONT.  
GIBSON & PERIN CO.  
CINCINNATI, OHIO  
MICHIGAN BOOK BINDING CO.  
DETROIT, MICH.

THE TODD COMPANY (Check Books)  
ROCHESTER, N. Y.  
W. B. CONKEY CO.  
HAMMOND, IND.  
SAMUEL DODSWORTH STATIONERY CO.  
KANSAS CITY, MO.  
FOREST CITY BOOKBINDING CO.  
CLEVELAND, OHIO  
AMERICAN BEAUTY COVER CO.  
DALLAS, TEXAS  
BLACKWELL WIELANDY CO.  
ST. LOUIS, MO.  
VILLEMAIRE BROS.  
MONTREAL, QUE.  
BOORUM & PEASE CO.  
BROOKLYN, N. Y.  
SCHWABACHER-FREY CO.  
SAN FRANCISCO, CALIF.  
CLARKE & COURTS  
HOUSTON, TEXAS  
LEVEY PRINTING CO.  
INDIANAPOLIS, IND.  
M. M. BORK AND SONS  
BUFFALO, N. Y.

COAST ENVELOPE & LEATHER PRODUCTS CO.  
LOS ANGELES, CALIF.  
DAVIS & HENDERSON  
TORONTO, ONT.  
THOS. GROOM & CO.  
BOSTON, MASS.  
FALLS CITY BINDERY CO.  
LOUISVILLE, KY.  
SMEAD MFG. CO.  
HASTINGS, MINN.  
DOBSON-EVANS CO.  
COLUMBUS, OHIO  
HAWKEYE BINDERY CO.  
DES MOINES, IOWA  
GEORGE SEELMAN AND SONS CO.  
MILWAUKEE, WIS.  
SAUGERTIES MFG. CO.  
SAUGERTIES, N. Y.  
IRWIN HODSON CO.  
PORTLAND, ORE.  
ROCHESTER WIRE-O BINDING CO.  
ROCHESTER, N. Y.



may forget that color is not the end in any case, but only one of the means to the end. He is apt to try adapting an advertising piece to a favorite color, rather than the other way around.

It can be stated as a conservative fact that no one system, formula, or series of rules will enable the advertising man or craftsman to find all the keys to beauty in color, and to its most effective commercial applications. The reason for this is that colors are not "constants"; they can result in almost endless variations in the way of psychological responses, according to the circumstances of their use.

To illustrate this statement:

Red is a sacred color to the Chinese, used on all imperial and festive occasions, weddings, etc. The color of mourning to the Chinese is white. A prominent American oil company once installed a number of white filling stations which failed to attract native customers until the funereal white color was changed.

In the United States the combination of red, white, and blue is one of the surest attention arresters because of its patriotic meaning, and not because of any intrinsic power in the combination.

Still another example of color's lack of singleness of effect: Yellow in certain uses induces unpleasant reactions, suggesting cowardice, radical journalism, etc. But it is said that one of the rules of the theater is never to do a comedy scene in any but a yellow light, or with yellow predominating, because it conditions us to a receptive mood. If the scene has a predominance of any other color, the reaction of the audience is off key and the lines do not "click."

Prefaced by the foregoing caution against too literal and too strict adherence to rules, formulas, and systems, it might be well to set down a few simple color definitions and rules that, being fundamental, should be known and clearly understood if color is to be used most effectively.

### What Is Color?

Color is non-existent in the sense that we ordinarily think of it. There are no red tomatoes, yellow ears of

corn, or blue grapes, considering these colors as intrinsic qualities of the objects. Whether we see them as red, yellow, or blue depends on three factors: (1) The light they receive (2) the way they reflect, absorb, or transmit this light (3) the color sensitivity of our eyes.

Color is an interpretation given to the senses by the delicate functioning of the eye. It is *not* a quality of objects.

### The Color of Light

The longest visible waves of light give the sensation of red; the shortest, violet. Invisible to the eye are still shorter waves called ultra-violet, and extra-long waves called infra-red.

Sunlight, containing an endless number of rays of all lengths, gives the sensation known as white.

Color as light is a profound subject, involving complex theories. It is extraneous to the practical nature of this article and will not be discussed further.

### Dimensions of Color

To measure and describe color there are three qualities known as hue, value, and chroma.

*Hue* distinguishes one color from another, as yellow from blue, red from yellow.

*Value* is the quality of lightness or darkness of a color. A dark value is known as a shade; a light value as a tint. Shades are obtained by adding black; tints by adding white.

*Chroma* signifies the strength of a color. It is the quality by which we differentiate between a strong color and one that is gray or weak. Sometimes the terms brightness and intensity are used instead of chroma.

It is in order to mention here that physicists and psychologists differ quite widely in their consideration of the qualities of color. Psychologists, for example, recognize the positive nature of black while to the physicists black is nothingness. Psychologists also contend that gray, although the result of white and black, has a basic visual quality that gives it a decided difference from both white and black.

### Primary and Secondary Colors

Red, yellow, and blue have been considered the primary colors since the time of Newton. According to more precise terminology these colors are known as red-purple, blue-green, and yellow. They are called primary colors because of their absolute basic qualities.

Each of the three secondary colors—orange, green, and violet—is located in the spectrum between the two primaries that compose it.

The combination of pigments of these colors, in varying proportions and with the addition of white and black result in the endless number of color effects available in four-color process printing.

### Complementary Colors

Many people, even in the ranks of the graphic arts, have a very vague idea of what is meant by a complementary color.

The color that balances another to make gray is that color's opposite or complement.

Red, yellow, and blue combine to produce black when mixed in equal proportions; they are, therefore, complementary to each other.

Yellow and blue counterbalance red, the other primary, therefore green, the combination of yellow and blue, is the complement of red and makes the most violent contrast with it.

### Law of Harmony

The most important law of harmony in color is based on relationship or the existence of a common basic element. For instance, any two colors which contain even a small quantity of the same primary color will be more or less harmonious. Orange and yellow are very closely in harmony because pure orange contains 50% yellow. There are three ways by which color harmony can be secured in advertising and printing:

1. *Monochromatic.* The use of one color, with modifications by use of tints and shades.
2. *Analogous or related harmony.* The combination of colors related to one another. For instance, red, orange red, violet red; or blue, green blue, and



# BECAUSE MORE LIGHT IS REFLECTED...

type and halitones are sharper on

## FRAOPAQUE

**SAY FRAY-O-PAKE FOR VISION'S SAKE**

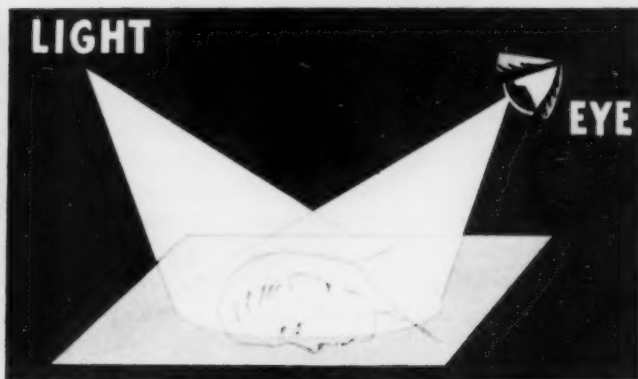


**Papers that absorb light deaden the job.**

The absorption of light by paper is the cause of many dull offset illustrations; it is the reason for much spongy, indefinite reproduction of type.

FRAOPAQUE's surface resists light rays; it doesn't absorb them; it reflects them to the human eye. This results in more sparkle for halftone illustrations; clearer, sharper, more inviting type matter.

After test comparisons between FRAOPAQUE and offset papers that absorb light rays, made on press with actual jobs, many lithographers have switched



**FRAOPAQUE reflects light . . . brightens the job.**

to FRAOPAQUE for improved reproduction.

We'll be glad to show you samples of such comparisons. Or, better, run a few sheets of FRAOPAQUE yourself on some of your present work. You'll see how FRAOPAQUE gives halftone subjects a distinct lift. You'll discover it adds crispness to your type reproductions.

Write your nearest Fraser office (New York or Chicago) for a portfolio of FRAOPAQUE and the names of your local distributors.

# FRASER INDUSTRIES

INCORPORATED

420 LEXINGTON AVENUE, NEW YORK, N. Y.

111 WEST WASHINGTON STREET, CHICAGO, ILL.

violet blue. Any combination of colors containing the same primary color as an element results in analogous or related harmony.

3. *Opposite or Complementary harmony* results from the use of complementary colors. Red with green, and blue with orange, for example.

#### Laws of Contrast

The laws of harmony include contrasts. But there are three distinct laws of color contrast, first stated over a century ago by Chevreul, who supervised the use of color in the famous Gobelin tapestry works in France. If color is to be used knowingly, it is important that these laws be kept in mind whenever color is specified.

1. *The Law of Simultaneous Contrast of Hue.* When two colors are used together, each color will incline toward the complement of the other. For example, using red and blue together, the blue will tend towards blue-green, which is the complement of red. The red will have an orange cast because orange is the complement of blue.

2. *The Law of Simultaneous Contrast of Value.* When a light color is used with a dark color, the light color will appear lighter and the dark color darker.

(It might be remarked here that the cool hues make the best tints, the warm hues the best shades. Violet, blue, and green—cool hues—are more attractive when white is added, but become dirty looking when darkened with black. On the other hand, darkening warm hues—red, orange and yellow—can result in beautiful shades of maroon, brown, and olive.)

3. *The Law of Simultaneous Contrast of Chroma.* When a strong color is used with a dull color, the strong color will appear stronger, and the dull color duller. Hues are most intense when their complements are used together.

So much for definitions and rules concerning the relations of colors, one to the other, and what we might term the physical or objective effects obtained when certain colors are used together.

#### Psychological Effects of Color

Now let us consider the psychological effects of color from the standpoint of the associations it arouses and the emotional responses to it.

The psychology of color can be considered, generally, under these four heads:

1. *Intrinsic Value.* Color is inherently pleasing. People universally like it. Second only to the satisfaction of the clinging and feeding instincts is the attraction of color for babies. The liking for color literally is congenital or "born in us."

2. *Attention Value.* Neither size, contour, texture, nor movement, considering each alone, has attention value to the same degree as color. Even thoughts expressed in beautiful typography, although they may be the eloquent product of a master's pen, must take second place behind color as far as attention value is concerned.

There are, of course, varying degrees to the attention value of color. In advertising that value declines almost in proportion to the increase in the use of color. But there is no denying that, regardless of how used, color is the most important quality anything can have to attract to itself attention, favorable or otherwise.

3. *Color Is Necessary to Life-like Realism.* In black and white illustrations of an object its important qualities, except density (or weight) and color can be depicted.

Take, for instance, an apple of unusual size and beauty. Its size can be accurately suggested by posing it held in hand. Thanks to the half-tone screen, the qualities of fine texture, and of contour, also can be shown realistically. Even its weight can be suggested in several ways; for instance, showing it on a scale, balanced against a couple of apples of ordinary size, or with the pointer resting on one of the dial's numerical designations.

But color, one of the most important "selling points" of fruit, is lacking. And even the most gifted writer would face an impossible task if he undertook to describe precisely the color of that simple apple.

This quality of realism that color can give to a subject reproduced through any one of the graphic processes represents the most important contribution of color to business promotion. It has made possible not only immeasurably more effective advertisements, but in many cases it has permitted the substitution of light, compact reproductions of goods on paper for heavy and cumbersome samples.

Until so recently as 1932 color photography, which had so much to do with making possible realistic reproductions in full color, resulted in unnatural colors, hard outlines, flat effects. Then revolutionary improvements in photographic technique led to full color reproductions that embodied all the elements of real art.

4. *Color Has High Memory or Association Value.* Color at a glance, subtly, instantly, and often subconsciously, can do more usually to get an intense emotional reaction through the power of association than can be obtained from the most deftly put word descriptions.

Red, most aggressive of all colors, suggests heat and energy. Inherently it is an active, warm color but, through its association up through countless ages with fire, this effect of warmth has a double reason for being.

The thousands of years during which man cooked his food over "red-hot" embers have left their mark in his memory, to provide the stimulus for an infallible reaction. And this stimulus is likely to persist for a long time, even though we gradually lose this association because of our modern "hermetically-sealed" heating units.

Red, the color of fire that is sometimes our master as well as our servant, and of blood, is logically used for danger signals too. Advertisers often use red and green, the stop-and-go signals, to take advantage of the psychological pattern they have impressed in us.

Yellow induces in us a mood of receptivity. Lacking the strong, passionate qualities of red and the spiritual qualities of blue, yellow is a



# **OFFSET INKS**



The dependable and uniform performance of these concentrated offset inks has resulted in their adoption by many outstanding lithographers who recognize the importance of selecting only the best inks it is possible to secure. Full strength colors which permit the production of brilliant effects in spare impressions and eliminate expensive press delays.

Improve the quality of your product by standardizing on these exceptional inks.

LANCER YELLOW

ARABIAN RED

BELGIAN BLUE

THOROBRED BLACK

Lithographed on a Rutherford High Speed Offset Job Press

## **THE FUCHS & LANG MFG. COMPANY**

(ESTABLISHED 1870)

**DIVISION • GENERAL PRINTING INK CORPORATION**

**(EVERYTHING FOR THE LITHOGRAPHER)**

**100 SIXTH AVENUE • NEW YORK**

BOSTON   PHILADELPHIA   CHICAGO   ST. LOUIS   CINCINNATI   SAN FRANCISCO   CLEVELAND   LOS ANGELES   FORT WORTH

# MIRAC

## LITHO PLATE BASE

(COPYRIGHT)

(PATENT PENDING)

A new, novel, non-corrosive litho plate base.

Completely desensitizes the surface of the plate by creating on it a hygroscopic film which is grease-repellent.

Will not affect the finest work.

Improves the working qualities of the plate, insures a larger number of impressions and prevents scumming and tinting when the special fountain solution furnished for the purpose is used.

Cost of material required to prepare a plate of medium size is approximately two cents.

Suitable for Aluminum, Zinc and Stone.

## MIRAC FOUNTAIN SOLUTION

This solution must be used in the fountain, as it works in harmony with **MIRAC Plate Base** and preserves the original surface created when the plate is first prepared.

A trial will convince you of the merits of **MIRAC** solutions.

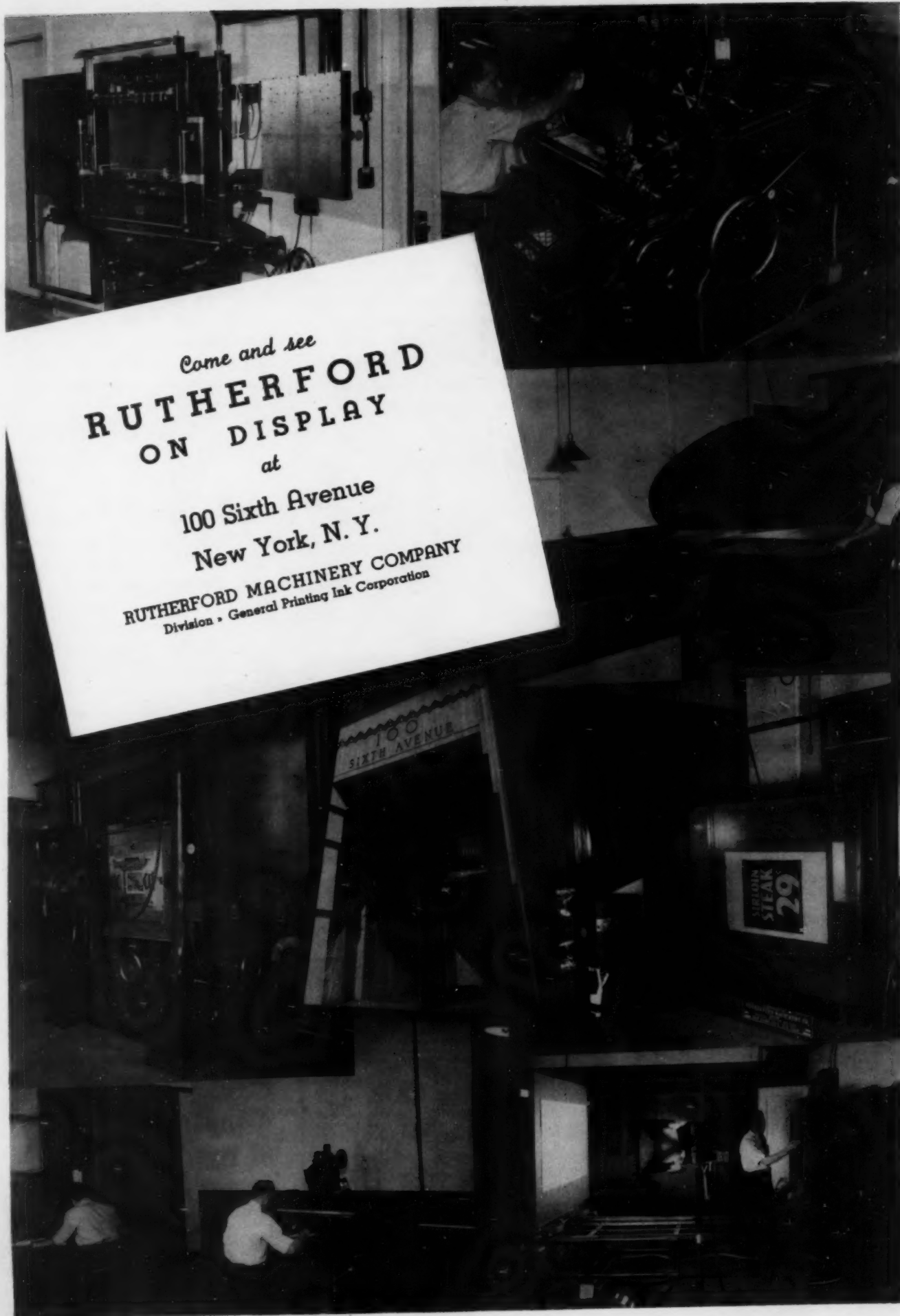
## THE FUCHS & LANG MFG. CO.

ESTABLISHED 1875

DIVISION • GENERAL PRINTING INK CORPORATION

100 SIXTH AVENUE • NEW YORK, N. Y.

PHILADELPHIA • LOS ANGELES • SAN FRANCISCO • FORT WORTH  
BOSTON • CINCINNATI • CHICAGO • CLEVELAND • ST. LOUIS





fine balancing color. Here, again, association plays a leading part. Yellow means "high noon," sunlight, to our subconsciousness. It suggests the brightest and most cheerful time of day. Intrinsically it is the most luminous of all colors and is best for counteracting shadows and dark spots.

Orange also suggests gayety, warmth, gold, liveliness. There is real magic in the combination of red and yellow that makes orange.

Blue stood for intangible spiritual qualities such as faith, honesty, truth, thousands of years ago when primitive man associated it with the sky, the heavens, the home of his gods. It has the same meaning today. Blue is also the sedative among colors; in some neuropathic clinics it is used to induce passivity in excited patients. In advertising it is used most tellingly to exploit the virtues of a product.

In addition to inducing in us receptivity to the esthetic attributes of a product, blue has always been associated with cold. There are lots of reasons for this association—water often is blue; ice is a bluish white; many parts of the human body when cold "turn blue." Blue intrinsically is a receding color, and is restful and cool. No wonder, then, that blue is a popular summertime color in advertising, and that it is used so generally to suggest cold or coolness, as in the advertising of refrigerators.

Green, connected most intimately with nature, is commonly used to suggest life and growth. Paradoxically, green is sometimes used to suggest sickness. And in illustrating foods, unless this color is confined to showing leaves and greens such as spinach, lettuce, etc., it will often result in unpleasant reactions. It must be very carefully used in a decorative way in food advertising.

Both violet and purple have strong psychic powers. They are the colors of mystery, sacrifice, melancholy, heroism, suffering, passion. They also suggest magnificence and royalty, giving reason for time-honored phrases such as "born to the purple." Purple was the color of the imperial Roman empire and down through the centuries it has remained the color of royalty.

White connotes purity and innocence.

Gray is the color of maturity and age. It is often used in financial advertising to suggest dignity and stability.

Black connotes death, stillness, tragedy, mourning.

So it goes. Almost every color has some association value—a *real* value that can be used deliberately to achieve many desirable emotional reactions in advertising and other applications of the graphic arts.

### Suggestions for the Practical Use of Color in Advertising and the Graphic Arts

#### Legibility

In advertising, especially in media such as car cards and posters, the legibility of color combinations deserves careful consideration, even though it result in the sacrifice of artistic qualities.

Actual tests, according to Carl Richard Greer in "Advertising and Its Mechanical Production," have demonstrated that comparative legibility ranks as follows:

1. Black on yellow background
2. Black on white background
3. Yellow on black background
4. White on black background
5. Blue on white background
6. White on blue background
7. White on green background
8. Green on white background
9. Red on white background
10. White on red background
11. Red on green background
12. Green on red background

The tests that resulted in this grading of color combinations for legibility disclosed astounding differences. Black letters on a yellow background, the most legible combination, could be read clearly at 260 feet. Green on red, at the bottom of the list, could be read at a maximum distance of only 90 feet.

Even though the subject, the observers, and all other factors in this test were constant or accurately compensated for so that the differences in legibility could fairly be attributed to innate qualities of the combinations, many research men have looked into this subject and the results they have gotten have been widely varied. A recent bulletin from the U. S. Department of Commerce

states that six experts say that black and white is the most legible combination while four favor black on yellow.

#### Colors Preferred by Men and Women

Repeated and careful check tests by T. M. Shepard proved that red is the favorite color of women and ranks second with men. Blue is the first choice of men and takes second place with women.

A number of two-color combinations submitted to a group of over fifty people—32 men and 25 women—resulted in the following order of color preference:

1. Purple-blue and yellow.
2. Blue and red
3. Red and green
4. Purple and orange

The darker colors of strong chroma and the combinations of complementary colors were the favorites.

M. Luckeish, an eminent authority in the field of light and color, once conducted a series of tests that disclosed the following preferences as concerned pure colors, tints, and shades.

	Men	Women	Both
Pure Colors	64.	56.5	60.4
Tints	42.7	49.3	46.
Shades	44.	44.5	44.3

This test suggests that the pure colors have the greatest appeal.

#### The Best Colors to Use With Black Type and White Paper

According to Faber Birren, an expert on color as used in the graphic arts, either a Delft blue or a vermilion is the best color for the most satisfactory correlation of black type on white paper. These two hues strike a happy balance between the two extremes of black and white.

Dark blue or purple as a second color is always heavy, and yellow is much too weak.

#### Obtaining Attractive Multi-Color Combinations

If a certain requirement calls for the use of two or more colors, and the use is not pictorial (in which case there would be no other course than to use the colors required to reproduce the subject faithfully), inter-

**YOU CAN GUARANTEE SATISFACTION TO YOUR CUSTOMERS  
ONLY WHEN YOU CAN RELY ON YOUR OWN EQUIPMENT  
.... so be sure to examine this pump**

Air from cylinder through by-pass in cylinder head enters this slot on its way to the outlet above. No opening in curved inner surface of cylinder means quiet operation.

Enclosed stud in piston holds wing close to cylinder at top, preventing loss of air pressure.

Air coming in at inlet at side comes through this slot into cylinder head by-pass and thence into the cylinder. No opening in curved inner surface of cylinder means quiet operation.

INLET threaded for standard iron pipe.

Direction of rotation, showing how extended wing scoops up the air admitted at inlet, each revolution carrying it around to the outlet.

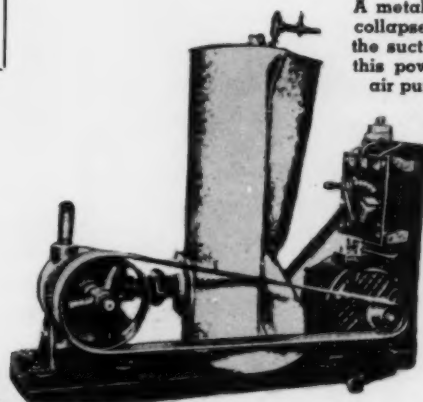
OUTLET threaded for standard iron pipe.

#### THE WINGS SCOOP UP THE AIR

Wing and cylinder surfaces become hard and glassy, insuring a perfect fit and positive pressure or vacuum. No composition tips to require renewal frequently.

A metal tank collapsed by the suction of this powerful air pump.

The easy-action hinge enables wing to open and close, thus becoming wear-compensating by the action of centrifugal force.



Here you have the only pump that "TAKES UP ITS OWN WEAR" and which will continue in your service for a long period of years as it has been doing as standard equipment on so many machines in the printing, binding, packaging and paper industries for 50 years.

**LEIMAN BROS. VACUUM PUMPS** *also used for blowing*  
PATENTED... ROTARY POSITIVE

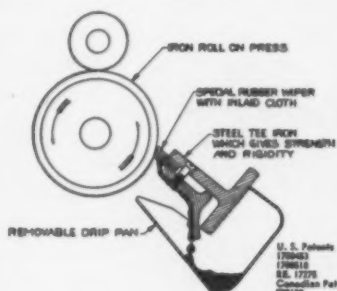
GET THE FREE INFORMATION

**LEIMAN BROS., Inc.** 110 CHRISTIE STREET, NEWARK, N. J.  
LEIMAN BROS. NEW YORK CO., 23 (NN) WALKER ST., N. Y. C.

MAKERS OF GOOD MACHINERY FOR OVER 50 YEARS

## INTERNATIONAL PRESS CLEANERS

are daily demonstrating their efficiency in increasing Output and Lowering Production Costs



### THIS IS OUR METHOD OF REMOVING INK FROM PRESS

We invite you to take advantage of our thirty day trial offer. If interested write and let us know the size and make of your press.

**INTERNATIONAL  
PRESS CLEANER & MFG. CO.**

112 Hamilton Ave.  
Cleveland, O.

You, too, will say **OKAY**

when you use

### Okay OPAQUE

For better finished negatives—smooth-flowing, dense opacity, quick-drying, non-cracking.

### Okay DEVELOPING INK

For dependable press plates—easily applied, clear, sharp, acid-resistant image, long press life, releases easily from bare grain under high humidity.

### Okay CELLULOSE OPAQUE

For masking—no sheet preparation to get a "bite," lays smooth without creeping or running, dense opacity, quick-drying, non-cracking, film easily removed with water.

### Okay WET PROCESS OPAQUE

Oil base, a new development—lays smooth without piling, dense, tenacious, will not chip or flake under heat, does not injure negative, film easily removed with alcohol.

Send for Samples

**FRANCIS G. OKIE CO.**  
247 SOUTH 3rd STREET, PHILADELPHIA

esting color combinations can be worked out quickly by cutting up little squares, strips, and other shapes of colored paper and laying them on larger pieces of white or colored paper, to serve as background.

When you do this you will soon discover that:

Complementary colors used together are most attractive when you make the area of one much smaller than the area of the other, or when the strength of one is much less than the strength of the other.

The best two-color effects are obtained first with hues that differ in value—one dark, the other light; second, with hues that differ in characteristics—one cold, the other warm.

Especially beautiful backgrounds result from the use of "neutralized colors"—soft gray-blues, gray-greens, violet-grays, browns, tans.

It is appropriate here to mention that the leading paper and ink companies have made tremendous contributions to the education in color of people engaged in advertising and the graphic arts. Most of them maintain research departments, concerned exclusively with the translation of proved color theories into practical suggestions for use, illustrated by means of samples, charts, etc., that are available to anyone who has a legitimate interest in the subject.

The large paper companies have been especially active in such educational work. And the leading ink companies are very generous in extending free of charge the benefits of their vast resources in accumulated data and current research. Anyone who has a problem in color when it is to be used commercially and when it involves printer's ink and paper will find the paper and ink manufacturers able and willing to help find the solution.

### Selling the Use of Color in Advertising and Printing

Granting the universal appeal of color, its use in printed matter means extra cost that can never be justified just for the sake of using color. There

must always be a reason for its use—and in most cases there is.

When color was first introduced into advertising it met with dramatic success. The early pioneers who had both the courage and foresight to launch out with this new technique reaped a very bountiful harvest. And they continued to realize handsome profits as long as their competitors remained ignorant of the strength of color. But as soon as color won widespread acceptance and recognition, the advantages of novelty and monopoly enjoyed by those few early advertisers expired. It is no longer so much a question of color as such, but rather *how* and *where* can color be used to make it yield a generous profit over the extra cost.

The benefit of color as an absolute advantage has passed long since. It is generally conceded that the use of color in advertising has come to stay, but today the only advantage that one advertiser has over another consists of *how effectively* he makes use of color and *how impressively* he produces it on the printed page.

As there are thousands of different commodities so there are thousands of reasons why color is used in advertising. But these many various applications of color boil down to a few fundamental facts which explain the use of color in advertising.

### Color in Magazine Advertising

The Association of National Advertisers in a two year survey, "Color in Magazine Advertising," pointed out that of twenty-eight advertisers who spent one million and over during one year, nineteen reported that out of their total \$38,986,023 in national magazines, \$24,666,340, or 63½% was for color. And one of the most interesting results of the study are the various reasons given by advertisers for the use of color:

32 used it because there are color values in the product.

28 used it because of added attention.

15 used it for its innate appeal.

15 used it because it helps throw an unusual atmosphere about product.

**THE PHOTO-LITHOGRAPHER**



**FOR  
BETTER  
PRESSWORK**



## **Vulcan No. 43 Offset Blanket**

Because of their smooth, fine-textured surface and their flexible, pliable body construction, Vulcan No. 43 Offset Blankets reproduce everything from the finest screen work to the heaviest solids with equal fidelity. They are especially good for difficult multi-color jobs requiring hairline register.

These blankets eliminate embossing and debossing, never become tacky, and require no running-in. Of even greater importance, they have an extra-long service life, which accounts for their ever-increasing popularity among offset printers who

demand top quality at a moderate over-all cost. Write for particulars about Vulcan No. 43 Offset Blankets, for all kinds of paper stocks, or Vulcan Red Blankets, which are unsurpassed for metal decorating. At the same time ask for information about Vulcan Litholastic Inking Rollers — the approved cure for roller troubles.

### **Vulcan Proofing Company**

Fifty-Eight St. and First Ave., Brooklyn, N. Y.

*Sales Representatives In Principal Cities*

***Vulcan* OFFSET BLANKETS  
and LITHOLASTIC ROLLERS**

Thus, based on this very extensive study made by the A.N.A. there are four fundamental reasons for the use of color, listed according to their relative value:

- (1) Color value in the product itself.
- (2) Attention value.
- (3) Innate appeal.
- (4) Atmosphere.

Another recent survey, this time of reader or consumer reaction, showed instances of color in newspaper copy

attracting 300 per cent greater interest than black and white. A baking powder advertisement in black and white resulted in a reader interest of 2 per cent, but the same copy in full color showed a reader interest of 77 per cent.

Such greatly increased interest in color over black and white in publication advertising also holds good in direct and mail order advertising.

One mail order house has found that color pages pull 6 to 1 better than black and white.

Another mail order company, one of the largest, printed one page in color in half of one edition of its catalog. The same page, except for change of item numbers so as to key the returns, was printed in black and white in the other half of the edition. Sales from the page in color were fifteen times the sales from the page in black and white!

In another case a page with a black and white illustration surrounded by a colored background pulled thirty times better than the same page in black and white. Used this way, the color added nothing to realism, but did add much greater attention value.

## LITHOGRAPHIC PLATE GRAINING CO. OF AMERICA INC.

**ONE** reason why we have grown to be the largest plate graining plant in the world is that every plate, no matter how small, must be exactly *right* before it leaves our plant

... and it must leave "on time" or sooner than promised.

## Zinc and Aluminum Plates

UNGRAINED • GRAINED  
REGRAINED

We specialize in small plates; including plates  
for the Multilith.

### Service plus Quality

You get this important *combination* when  
you send your plates to us.

**LITHOGRAPHIC PLATE GRAINING CO.**  
of America, Inc.

41-43 Box Street, Brooklyn, N. Y.

EVERgreen 9-4260-4261

### Mille' Issues New Specimen Sheet

W. P. Mille', 55 Ramsey Avenue, Yonkers, N. Y., well-known for a number of years among lithographers for his expertly drawn and engraved border and tint designs, both stock and made to order, has issued a new specimen sheet that shows some of his stock designs, available either on zinc plates or negatives.

The new specimen sheet, No. P-4, will be sent, on request, by Mr. Mille' to any lithographer who has not yet received a copy.

### New Lighting Fixture Developed for Detail Work

The "Spraylite," a newly designed fixture producing a soft, diffused quality of illumination for close detail work, gives a large reflecting surface for the proper diffusion of light to eliminate shadows and relieve eyestrain.

One of the outstanding features of this new fixture is the remarkable ease of keeping it clean. Since it requires no glass covers, cleaning is reduced to the simple matter of occasionally wiping off lamps and reflecting surface with a damp cloth. Complete information about the new "Spraylite" may be obtained from the Goodrich Electric Company, 2900 No. Oakley Avenue, Chicago, Illinois.

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## Consider Equipment with Distinctive Advantages

### Wesel Plate-Coating Machine

(Right)

• This machine has an automatic *air-circulating* device that attracts no dust from outside. *A distinctive advantage.* Requires no extra motor for that purpose. Keeps the warm air *uniform and in constant motion*,—a factor insuring speed, consistency and cleanliness.

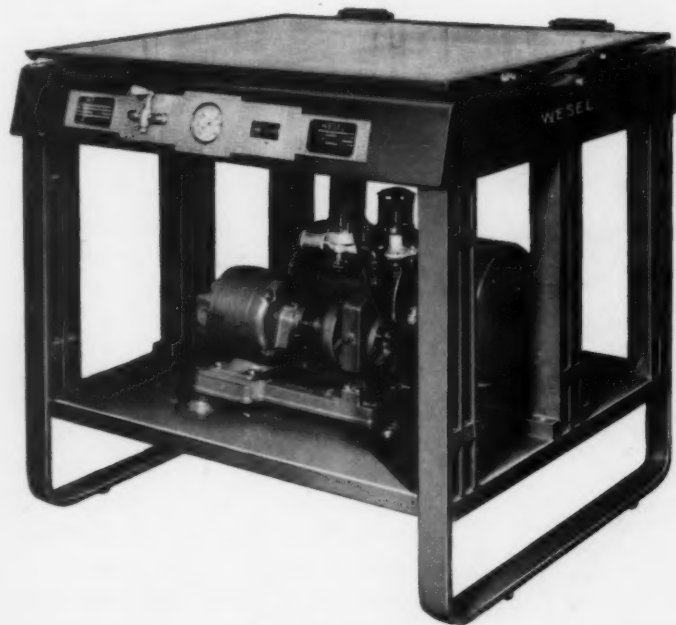
Driven by direct-connected, geared-head motor for positive and constant speeds, controlled by variable speed regulator.

In addition to the copper washing spray with automatic cut-off, this machine is fitted with a perforated copper spray pipe for cleansing the housing.

*Alluminum Alloy* revolving table; rustless alloy steel drum (*not tin*); ballbearing construction; adjustable legs; convenient drain connections; pilot light, etc.



*Made in all Standard Sizes*



### Wesel Automatic Vacuum Printing Frame

(Left)

• This unit has several distinctive advantages. The *automatic vacuum control* saves over two thirds of the electric current. This one advantage makes the most popular machine we have ever designed. Over a thousand are in use!

Vacuum contact may be had in two to three seconds. And there are no hooks, clamps or fastenings. The new "quartz crystal" glass *permits 25% faster exposure*. Motor and pump are built into one integral unit, the metal base of which is supported on a series of compression springs, eliminating all noise and vibration.

Entire mechanism operated from one central control panel. Nothing to get out of order.

*Made in Two Standard Sizes*

---

## WESEL MANUFACTURING CO. • SCRANTON, PA.

NEW YORK  
11 W. 42nd Street

CHICAGO  
201 N. Wells Street

SAN FRANCISCO  
431 Clay Street

MONTREAL  
637 Craig Street West



### Eminent Authorities Will Prime L. N. A.

(Concluded from page 22)

Press—adds to the wealth of his background and equip him splendidly for a factual discussion of problems in this particular field.

Second on Thursday morning's program will be Elliott Odell, advertising director of Fawcett Publications, Inc., New York, who will discuss the more important current opportunities for the expansion of lithographic sales volume. On the

basis of his former association with the Topics Publishing Company, Mr. Odell is thoroughly familiar with the unique program that the Lithographers National Association has undertaken in the last two and a half years through its Educational Department and is therefore unusually well fitted to discuss the subject in appropriate terms.

During his eight years' executive association with Topics Publishing, Mr. Odell widened his scope of activities and won recognition as a

leading merchandising authority in the drug, cosmetic and food fields, having been active in the development of Drug Trade News, and directly responsible for the birth and development of Food Field Reporter.

The closing guest speaker at the Thursday morning—and last—open session of the L. N. A. program will be Miss Pauline Arnold, Vice President of the Market Research Corporation of America, Miss Arnold's contributions in the field of Market Research have been outstanding during the last dozen years, much of the initial research work underlying the development of radio advertising having been carried on by her company. "Consumer reaction" to the merchandising and advertising efforts of national advertisers will be the very pertinent subject of Miss Arnold's address.

The Annual Dinner will be held as usual on Thursday evening, May 12th, to which all members and guests are invited, with their families.

Friday the 13th (!) will offer a special mental hazard for contenders in the Annual Golf Tournament to be held that day—with prizes for members and guests, and the ladies.

### Printing in New Format

Printing Magazine appeared in new format and new editorial treatment, commencing with the April issue. It has adopted the standard 9 x 12 inch page size and new type dress featuring larger, more legible text type and bolder headings, a current streamlining trend in magazines and newspapers.

"Printing" now tries to save readers' time by arranging its news on a functional basis under three general headings, "Management," "Production" and "Marketing." While maintaining its policy of covering all the news of the industry, it now places greater emphasis upon practical ideas.

Articles on the new thin papers for air mail use with data on savings in postage through their use, on differing opinions as to whether or not the letter press printer should install offset equipment, and on the care and treatment of rollers in the printing plant are featured in the April issue.

Even in

**Eclipse  
Deep-Set  
Black**

**Convention Assembled  
carries the  
Day!**

Eclipse Deep-Set Black, made expressly for deep-etch plates, is known by lithographers everywhere as the ink that comes through every time.

Because it is an opaque, dense, easy working black, it lightens the job of the lithographer who must turn out high quality work economically.

Eclipse is only one of the high quality offset and letterpress inks made by us, both in black and colors.

"NOW, HOW  
MANY IN FAVOR  
OF ECLIPSE  
DEEP-SET  
BLACK?"



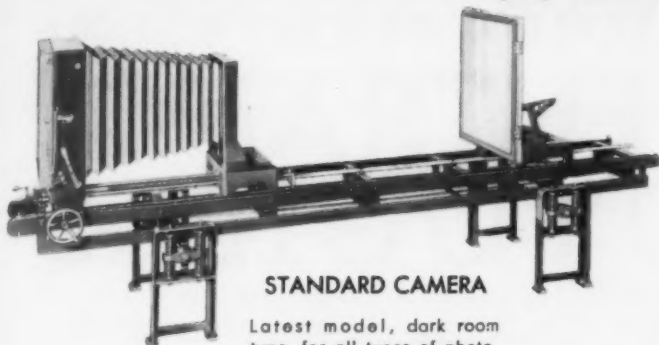
A delegate absent—just remembered that he forgot to order Eclipse Deep-Set Black for that de luxe job they are doing back home!

## Gaetjens, Berger & Wirth, Inc.

Gair Building, 35 York Street, Brooklyn, N. Y.  
538 South Clark Street, Chicago, Ill.

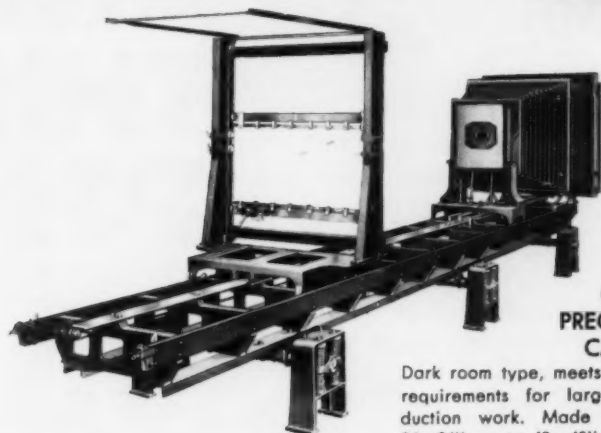
# VALETTE OFFSET PLATE MAKING EQUIPMENT

★ *Selected by Experts*



**STANDARD CAMERA**

Latest model, dark room type, for all types of photo-lith work. All metal construction. Made in three sizes: 20 x 20" — 24 x 24" — 31 x 31".



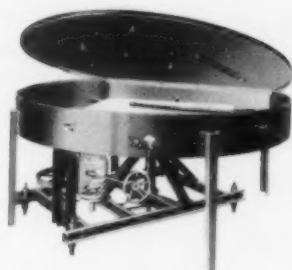
**COLOR PRECISION CAMERA**

Dark room type, meets exacting requirements for large reproduction work. Made in sizes 24 x 24" up to 60 x 60".



**WHIRLER**

A practical machine for the smaller press plates. Made in three sizes, 16 x 20" — 21 x 26", and 26 x 37".



**WHIRLER**

Considered one of the best plate coating machines on the market. Machine comes fully equipped. Made in four sizes, 35 x 44" — 40 x 51" — 46 x 56" and 51 x 70".



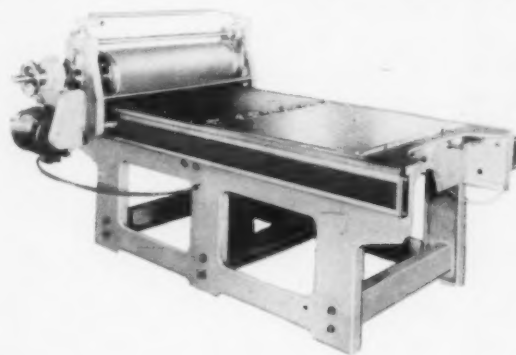
**VACUUM PRINTING FRAME**

All metal, complete with motor, gauge and vacuum pump; operates direct from light socket. Standard sizes, 16 x 20" — 21 x 26" and 26 x 37".



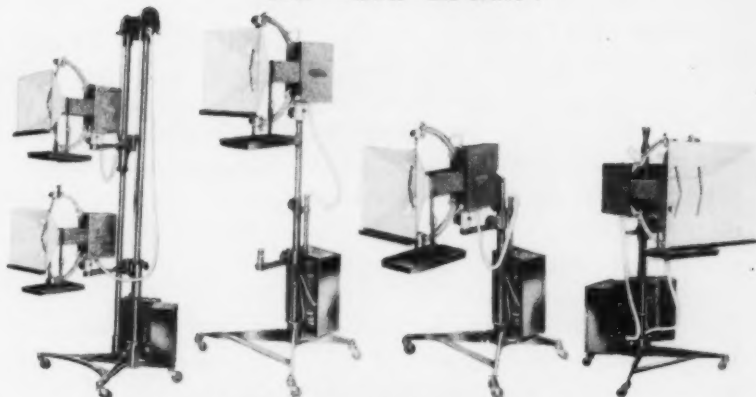
**VACUUM PRINTING FRAME**

Elevating type, rigid steel tube construction, fully equipped. Comes in four sizes, 35 x 44" — 40 x 51" — 46 x 56" and 51 x 70".



**OFFSET PROOFING PRESS**

Power operated, improved model, precision built. Six standard models ranging from 22 x 30" up to 45 x 55".

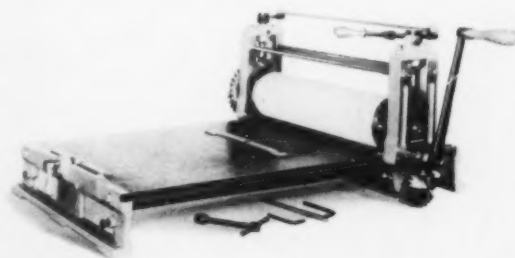


**OPEN FLAME CAMERA AND PRINTING LAMPS**

DOUBLE DECK CAMERA LAMP, for large camera 31 x 31" or over. SINGLE ARC CAMERA LAMP, one speed only, for camera 20 x 20" — 24 x 24" also 31 x 31". SINGLE ARC PRINTING LAMP, open flame type, accommodates smaller printing frame; 26 x 37" or smaller. TWIN ARC PRINTING LAMP, open flame; gives full light coverage; for printing frame 35 x 44" and larger.

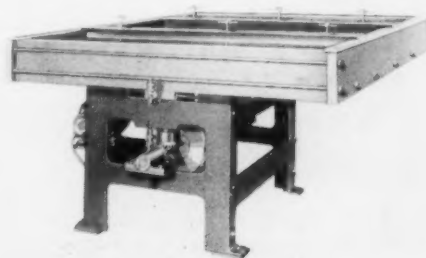
**OFFSET PROOFING PRESS**

Table model, ideal for the smaller proving jobs; just the machine for the photo-lithographer and planographer. Two sizes, 12 x 16" and 14 x 21".



**OFFSET PLATE GRAINING MACHINE**

Designed and built for the photo-lithographer and planographer—grain one up to six small press plates in one operation. Fully equipped to do the job.



**LITHO EQUIPMENT & SUPPLY CO.**

815 WEST OHIO STREET, CHICAGO, ILL.

## "Copy for Reproduction"

(Continued from page 28)

Mr. Sol Hess, Associate Art Director of the Lanston Monotype Machine Company, said in a recent talk, "Considerable thought and experimentation is being given to faces intended for the various reproductive processes, such as gravure and offset."

The concern with which the experts look upon the problems confronting the photo-offset lithographer is noteworthy, because of the integral part which type faces play in copy for reproduction. The same concern can be regarded as quite practical for many of the modern faces are designed with these thoughts in mind and virtually allows one to say that most any modern type face can be used successfully for reproduction.

Script type generally is least satisfactory for reproduction because of its contrasting thick and thin lines, small loops and curves, and other forms which have a tendency to fill in and become solids.

Sans serif type faces are continuing in their merited popularity because of the ability which photographers and plate makers have in reproducing them without loss of characteristic form or design.

Headings, display lines and special emphasis phrases require characteristics which differ from the body of text of an advertising piece and only trade judgment and good taste can be considered as their controlling

*Now is the time for all good men to come to the aid of their*

**Now is the time for all good men to come to the aid of**

# THIS ENTRANCE PHOTOGRAPH

*Line 1 shows poor reproduction of fine line type; compare with line 2, in which a type of heavy, uniform lines is used. Line 3 shows result of pitted copy; compare with line 4, the result of a good proof.*

factors. The choice of the general text of the advertisement, booklet or mailing piece, however, requires careful consideration with the following thoughts looming constantly in mind: the size of the finished type, the area of the space available, the general qualities of the type face for offset reproduction.

Although all copy cannot be composed of bold or italic caps, the fundamental fact remains that letters which are uniform in design and structure (of monotone quality) usually reproduce best.

All the foregoing ideas must not be construed to mean that any of the conventional type faces which are not entirely monotone cannot be reproduced well if the original proofs are properly formed and the size and method of reproduction is not extreme.

The fact that every step in the reproduction of printed impressions by any method tends to show some loss, is argument enough for a con-

centrated investigation into the causes and advisable remedies. Practically speaking, the author's suggestions for overcoming the difficulties lies with the production of the original proofs.

Reductions of originals constituting type show some improvements in sharpness and snap when the originals are of a large font and the copy is photographed to reduced size. Care should be used, however, in the choice of the proper type face, as illustrated in the accompanying examples of open letters, and is reason enough for the advice against the use of wrong type faces. Similar circumstances exist in the choice of type faces on typewritten copy, which is illustrated when comparing the results of Pica size typewritten copy reproduced same size and the reduced reproduction of Great Primer typewritten copy.

Broken letters and pitted letters are added reason for the choice of new and well sorted type in the composition of printed copy. The choice of a new letter to replace the nicked, pitted or squashed letter demands so much less time and energy in the original proof and can result in a better job if the tussling or "scratching in" of the letter on the plate is eliminated.

The condition of the proof press and the condition of the type influence the quality of the finished proof. Any cylinder press or proof press is recommended over the platen type press, because of the evenness of the applied pressure.

The condition, quality and the method by which the ink is applied to the type has a very definite influence

*Open lettering is poor copy for reproduction.*

## Now is the time for all good men to come

+ The need for these sections when required they may be obtained from the Kearny Merchandise Department.

\* In these cases the B.S.P. sections, however, is a direct copy of the B.S.P. section, that are available to the

**NOTE 1:** Disregard Requirements book 80.

**NOTE 2:** When adjustments are made adjustments of Focus

The need for these sections is not included in this handbook. If required they may either be borrowed from the Kearny Merchandise Department or requisitioned from the Merchandise Department.

In these cases the B. S. P. is a direct copy of the B. S. P. section, however, is a direct copy of the B. S. P. section, that are available to the

**NOTE 1:** Disregard Requirements book 80.

*Reproduction on left is from Great Primer copy;*

*on right from Pica typewriter copy.*



on the quality of the proof. Too often the ink is too soft or of such poor quality as to produce a result wholly unsatisfactory for reproduction.

The general inking and printing conditions all tend to produce letters which have a sharp outline but a center which is more or less mushroomed with grey-black globules of ink which form a faint veiled connection with the solid black centers and sharp outlines. The tendency is for the small type faces to have a wider band of grayness and often this weakness seems to cause the whole letter to appear gray. This condition is only visible, however, under a magnifying glass and on the focal plane of the camera, but to the naked eye the type seems quite solid and sharp.

Frequently, however, the inking method of the type is not the only procedure at fault, for the kind of paper and the amount of pressure applied when the impression between the paper and the inked surface of the type is made, also contribute their share to the general unsatisfactory results.

First of all, the surface of the paper which is necessary to produce the sharpest impression is the paper which tends to hinder the general drying of the printing ink. This condition alone accounts many times for the separation of the centers of the letters from the sharp outlines since it retards the absorption of the ink and causes a certain ease for the contraction of the ink into globules, which make up the centers of the letters. Thus a faint grayness is seen in the smaller letters, especially if the proofs are pulled on coated stock.

Many of the uncoated stocks also detract from the sharpness of the letters of the proof because of their softness and dullness. The color of the stock can be a detracting factor if an extremely yellow stock is employed, but such extremes are seldom resorted to for proofs; moreover the orthochromatic sensitivity of modern negative paper and film allows for some latitude in the color of the proofing paper. Thus the quality of the stock for proofs narrows down to a semi-dull hard surface paper which allows for rapid drying and sharpness of the type impression.

**"... and it has doubled  
the life of our dampening rollers"**

**This statement has been contained in  
more than one of the letters received  
from enthusiastic users of**

# AQUATEX

"TRADE MARK REG. U. S. PAT. OFF."

**The New, Improved Seamless  
Tubing for Lithographic and  
Offset Dampening Rollers**

Not only will it lengthen the life of your dampening rollers, but it will step up your production because it

1. Gives an absolutely even distribution of water;
2. Throws no fuzz or lint;
3. Has uniform thickness; will not vary in strength under various working conditions;
4. Stays in position; will not creep;
5. May be washed on or off the roller.

**"JUST ANOTHER WAY TO MAKE THINGS EASIER"**

Write to any of the following for information and samples:

## DISTRIBUTORS

Sam'l Bingham's Son Mfg. Co. Chicago, Illinois, And All Branches  
California Ink Company San Francisco, Calif. And All Branches  
E. Roy Dudley, Newark, New Jersey  
The Fuchs & Lang Mfg. Co., Chicago, Illinois, New York, And All Branches  
McKinley Litho Supply Company, Inc., Cincinnati, Ohio  
Gustavo E. Mustelier, Havana, Cuba, and Puerto Rico  
National Roller Co., New York City  
Printing Press Parts & Supplies, Inc., Boston, Mass.  
(Owned and operated by Wild & Stevens, Inc., Boston, Mass.)  
Wortman Roller Company, Cincinnati, Ohio

ALSO

SOLE MANUFACTURING AGENTS



**GODFREY  
Roller Company**

211-217 N. Camac Street. - Philadelphia, Penna.  
WILLIAM P. SQUIBB, President

Roller makers for 73 years. Lithographic — composition — newspaper — varnish — lacquering — every kind of good roller required for good printing and lithographing.

The contribution which pressure pays between the type face and the paper can easily spell success or failure in any photo-offset job where a proof is used as copy. Fuzzy type is just as destructive as light or uneven impressions.

Smudged or dirty forms also cause a tremendous amount of additional work for the opaueing department and so often the presence of the dirt in the copy is sure to mean an inferior negative, plate and finished print.

Letters which are squashed or

filled in, or in which the separations between parts of the letters are veiled over, usually result in solids on the negative. This is illustrated especially in the "m," "n," "u" and "e," where a base line is present or the spaces of background should show through.

Owing to the universal use of type-written copy for advertising purposes, much research has been applied to qualifications of suitable type faces for photo-offset copy. This research has been carried on mainly by the

The grind-joint auctioneers in a routine day violate practically every city and state regulation governing auctioneering, but they manage to escape prosecution. They congregate on the obvious steps—usually small wage earners with little money in their pocket—and try to avoid selling anything to citizens of obvious substance, who might make things hot for them.

Most rummies never discover they have been rooked, and i

*Reproduction from fuzzy Elite typewriter copy.*

a hundred compacts to the ladies. Now today we have some equally valuable tokens here that we're handing out at 14 time. But to prevent chiseling—why we've had men try to grab four-five souvenirs apiece—we ask you to trust us a small deposit on each one, only a dime, just to make us that they go to the people entitled to them."

The dime, he explains, is not to pay for the presents, and will be returned when they are distributed. But it is

*This is how dirty copy reproduces. Original was Elite typewriter copy.*

manufacturers of various typewriters and has resulted in a great list of type faces available on the typewriters supplied to the retyping departments. Additional experiments have been carried on to produce machines of even touch, for example, the "Varityper" electric typewriter. Much experimentation has been carried on with the purpose of producing ribbons which will produce the maximum blackness in the type-written material, with various styles of ribbons as silk, carbon paper and colloidal carbon or bronzed ribbons resulting. Reference is called by the author to the specimens shown in the "Photo-Lithographer's Manual," pages 83-85. Generally speaking, those characteristics which make good reproduction proofs from type impressions are applicable to the proofs resulting from the typewriter.

The final steps taken in preparing the copy after it has been composed require additional care and the exercise of good judgment. For instance, (1) fresh proofs should have a tissue between them and should not be squeezed or smeared; (2) corrections noted during proofreading should be made preferably by resetting the whole line or at least several words of the sentence; (3) proofreader's marks should be put in the margins with light blue pencil; (4) proofreader's marks should not show in the text of the corrected proof; (5) all rules, brackets or designs should preferably be set with the type, but if hand drawn these should be drawn with india ink and a good ruling pen in a size comparable with the type; (6) ruled borders for half-tones should be set with the



## GELB Standard Lamps

meet every requirement of the  
photo-lithographer

You can lighten your light problems with Gelb Lamps. They are manufactured according to one high and exacting standard of mechanical precision, making the various parts of any lamp interchangeable with the parts of other Gelb lamps.

There is a Gelb Lamp to meet every need. You can choose from a varied range of models and sizes.



**GELB CARBON  
PRINTING LAMP  
MODEL C-125-T**

The Gelb "Hot Spot" Eliminator produces an even and intense illumination without heat or glare on the copyboard or printing frame at close range. It is standard equipment on all Gelb lamps. It diffuses and distributes the direct, harsh and intense illumination from the arc crater and makes it possible for the negative to reproduce every detail in the copy.

**WE ARE ORIGINATORS — NOT IMITATORS**

Write for catalog outlining the "7 Points of Superiority" of Gelb lamps.

## GELB LAMP MFG. CO.

250 WEST 54th STREET, NEW YORK, N. Y.

type; (7) all type, whether it is to print in black or in mixed colors, should be set and a complete proof pulled in black of all the type; (8) all paste-ups, inserts and corrections should be done with the aid of a sharp scissors, rubber cement and a small brush, "T" square and drawing board, ruler, art gum eraser and chinese white. The edges of the insert should be beveled so as to eliminate shadows.

Sufficient space should be allowed between the edge of the paste-up and the remaining type of the copy, also between the edge of the paste-up and the lettering. The back of the paste-up should be evenly covered with a thin coating of rubber cement and the type squared and evenly placed with relation to the other type. All excess rubber cement which has been squeezed out should be allowed to dry and then gently removed with an art gum eraser. Avoid erasing over the other type. The edges of the paste-ups can then be painted over with a light coating of chinese white; (9) All sizes of reproduction should appear upon the completed proof, at the bottom for the new width size and at the right side for the new height; (10) line copy should be complete in every detail before it is given to the camera department.

### L.T.F. Class Visits Ink and Equipment Plants

THE "Management in Lithography" class of the Lithographic Technical Foundation obtained an insight into the ink and equipment end of lithography on April 12 as guests of the Fuchs & Lang Mfg. Co. and the Rutherford Machinery Co., divisions of General Printing Ink Corporation. Messrs. John Devine and William Recht, Divisional Managers, acted as hosts.

The class, which is directed by W. M. Winship of U. S. Printing & Litho Co., first met at the 100 Sixth Avenue offices of the above companies and went through the Rutherford demonstration room. They watched the Photo Lettering Machine in action, saw how negatives are con-

verted into plates on frames, whirlers, composing machines and cameras.

Then they were whisked to Rutherford, New Jersey, where they witnessed the assembling of lithographic equipment and watched the evolution of printing ink through the various processes, including the methods of control. After this they listened to Dr. Stockmayer, chief chemist of Fuchs & Lang, discourse on the importance of ink in lithography. Practical experiments and demonstrations on the chemistry of ink accompanied

Dr. Stockmayer's talk, which was followed by questions and answers.

The meeting adjourned after a buffet supper, and the class departed much the wiser.

### A Tip for Your Customers

Lithographers' customers who issue catalogs should be reminded of Form 3547, provided by the Post Office Department to assure return to sender of mailing matter undeliverable because of addressees' change of address.

## We Cover the West Coast

**If** you are west of Chicago we can help you keep the wheels moving (and the profits rolling in) by supplying you quickly with dependable equipment, photo supplies, and chemicals from one of our six completely stocked offices.

Your phone will bring a representative — quickly!



Headquarters  
on the West  
Coast for  
EQUIPMENT  
PHOTO  
SUPPLIES  
CHEMICALS

PHOTO PROCESS DEPARTMENT

**The California Ink Co., Inc.**

545 SANSOME STREET • SAN FRANCISCO, CALIF.



## Bank Stationers Will Meet May 9

**T**he Annual Meeting of the Institute of Bank Stationers will be held Monday, May 9 at The Homestead, Hot Springs, Virginia. Officers and Directors for the coming year will be elected. Reports on the activities of the Institute during the last year will be made and plans for the coming year submitted. While voting on Institute business necessarily will be restricted to members, all bank stationers are invited to be present at the members' luncheon at 1 o'clock and to participate in the open session of the meeting having to do with a survey of the Institute's work during the past year and the plan of activities for the coming year.

As has been the custom in recent years, the Annual Meeting is held the day before the opening of the convention of the Lithographers National Association, Inc. This year, as in the past few years, the program of

the Lithographers National Association, Inc., convention will have a speaker sponsored by the Institute of Bank Stationers. This year's Institute speaker at the LNA convention will be Mr. William R. Kuhns, editor of *Banking*.

The whole emphasis of the three day lithographers' convention will be on various phases of aggressive merchandising. Those familiar with the campaign of the Institute of Bank Stationers, which is now well into its third year, are aware that the efforts of the Institute in the national picture are to maintain stability in the bank stationery industry where it exists, and to seek to restore prosperity to the industry where it is still depressed through aggressive merchandising. The Institute sponsored speaker, Mr. Kuhns, will deal, among other things, with merchandising opportunities for bank stationers.

A survey of a representative group of bankers throughout the country has recently been completed by

*Banking*. This survey was aimed at uncovering, among other things, where bank stationers could be of greater service to bankers under existing conditions. Mr. Kuhns will use some of the material uncovered by the survey for part of his address.

## E. P. Lawson Dead

Edgar Percy Lawson, age 65 years, chairman of the board, E. P. Lawson & Co. Inc., New York, died April 18 in Florida.

Born in Alabama, Mr. Lawson came to New York in 1898 and successfully introduced Seybold paper cutting machines in the Eastern states. Later, he formed his own company to handle this line of machinery and his firm subsequently became selling agents for the Seybold Division of the Harris Seybold Potter Company, handling a complete line of bookbinding machinery. Until 1936 he served the Lawson firm as president. In that year he became chairman of the board.

## Bronzing jobs mean sure extra profits when you operate a **MILWAUKEE BRONZER**

**which bronzes and cleans sheets in one quick operation**

***A Milwaukee Bronzer has other advantages too:***

- |  |  |
|--|--|
| <b>1</b> Every one of the four sizes—19", 35", 51", and 67"—is portable and can be used with different press units.        | <b>3</b> It is economical in use of bronze.  |
| <b>2</b> Delivery is direct from bronzer, independent of press. No synchronizing of bronzer and speeds press is necessary. | <b>4</b> The operating cost is unusually low. Its simple and sturdy construction permits efficient operation without need for especially trained help. |

*Write for further information. Be sure to mention largest size sheet to be bronzed, also names of presses.*

**C. B. HENSCHEL MANUFACTURING COMPANY**  
MILWAUKEE, WISCONSIN



# SHOW-THROUGH

*has no place in offset work!*



Unretouched photomicrograph, 250 times actual size. Edge view of an offset-printed four-color illustration on Hammermill Offset. The close, compact surface holds ink on top of the sheet.

## Hammermill Offset Paper holds ink on top of the sheet and helps you profit from finer color jobs

**H**AMMERMILL OFFSET has the opacity needed to prevent "show-through" of color masses and type. Its compact, non-absorbent surface keeps colors on their own side—and helps you turn out jobs that please your customers.

Use Hammermill Offset and you can count on a full even lay of ink . . . on retention of full color brilliance and sparkle . . . on accurate, fine-line register and a high degree of sharpness in illustrations . . . on clarity and readability of the small-

est text. The results will be broad-sides, booklets, catalogs that will win customer approval and repeat business.

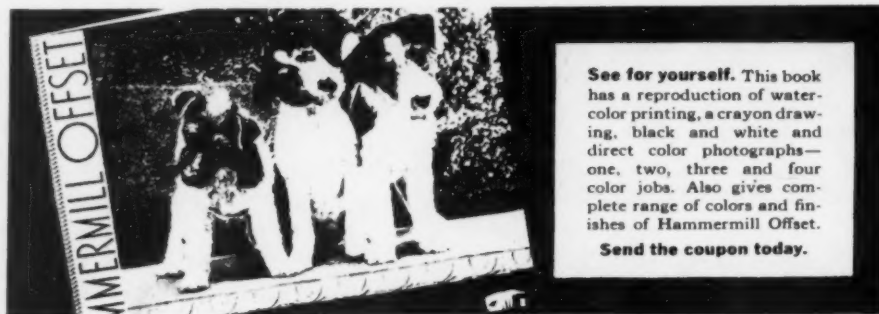
Press time is saved with Hammermill Offset because it is made free from fuzz, lint or loose fibers. There is less time out for washups and less danger of ruined plates and blankets. You get better work because of more accurate press register in winter or summer. Every Hammermill paper machine is equipped with an automatic electronic control of the mois-

ture content of the finished paper—a protection against curling, waving, shrinking, stretching, wrinkles and costly feeding troubles.

Hammermill Offset special finishes are distinctive because they are alike on both sides, permitting the economy of work-and-turn press runs.

\* \* \*

Send coupon today for Hammermill Offset Demonstration Book and see for yourself the fine work possible when you print on this justly popular and widely used paper.



**See for yourself.** This book has a reproduction of water-color printing, a crayon drawing, black and white and direct color photographs—one, two, three and four color jobs. Also gives complete range of colors and finishes of Hammermill Offset. **Send the coupon today.**

Hammermill Paper Company  
Erie, Pennsylvania

Please send me the Demonstration Book of Hammermill Offset.

NAME \_\_\_\_\_

POSITION \_\_\_\_\_

(Please attach to your business letterhead)

## REASONS FOR POPULARITY OF DEEP-ETCH

**I**N a talk before the Litho Club of Philadelphia, Pa., on April 25, Arthur Glaeser of The Senefelder Company, Inc., New York, stated in a very succinct and clear way the reasons why deep-etch plates have grown so rapidly in the favor of photo-lithographers.

Part of Mr. Glaeser's talk follows:

Why has deep etch become so popular and why is it generally conceded that deep etch makes the most dependable press plate available today? "Why" is the question we must constantly keep asking ourselves as our business continually becomes more scientific.

As there is in chemistry a law of definite proportions which controls every chemical reaction, so there is in our business. There are certain basic principles which do not deviate under any condition and, therefore, nothing is done without a definite reason. I will now endeavor to point out the advantages of deep etch plates.

### 1. Longer runs are possible.

Why?

- a) Milder fountain solutions may be used because the plate holds more water.
- b) The plate is completely desensitized by the Deep Etch Coating Solution.
- c) There is a positive binder between the plate and the ink.
- d) The lightest tints are just as firm as the heavier tones. This is an exclusive feature of deep etch. Inasmuch as this is true it is possible to carry fine tints of strong colors and thereby eliminate additional printing. For instance, it is possible to eliminate a light blue by carrying a fine tint of the stronger color. This also holds true of red, black or any other strong color. I might mention in this connection, as we all know, that

the fine tones are always the first to show signs of wear on the press when albumen plates are used or any other process.

### 2. Ability to carry more ink without overcrowding rollers.

Why?

- a) Because of the better lifting qualities of the plate.

### 3. Elimination of minor press stops.

Why?

- a) The fact that deep etch plates resist tinting as well as wearing, eliminates the necessity of stopping the press to rub out a tint or try to revive a weakened area. This saving in press time more than compensates for any additional costs involved in making a deep etch plate. The important feature of deep etch is the saving of press time. The press department is the only production department—the customer does not buy the plate but the printed sheet, and the more press stops you can save, the greater will be the production.

### 4. True reproduction of the positive.

Why?

- a) The dot is reproduced sharper, giving a smoother gradation of tones. There is less printing latitude than with albumen. By that I mean a variety of prints cannot be obtained by varying the exposure time to extremes.
- b) For this reason the artist knows what to expect from his positives. Here we come to an important point and that is "what does the artist expect from his positives?" He has a right to expect everything that is opaque, including high light dots, fingerprints, cigarette ashes,

ruling pen try-outs, etc. Very often an artist will go too far with his dot etching, causing the dot to become gray and rather than make the positive over he will ask the plate maker to try to hold the dot by undertiming the exposure and thereby working close to the danger line of an underexposed plate. This procedure defeats the entire purpose of deep etch which is a dependable press plate. It is absolutely essential that correct positives be used.

### 5. How shall we arrive at a correct positive?

- a) First let us take a color job such as I have here. The first step in proceeding with this job will be to properly lay it out, placing all corner and register marks on the copy. This insures having photographic register marks carried throughout the job. In no other way can perfect register be assured. When the job is ready for the camera, four continuous tone color separations are made. These separations are corrected by the artist as far as possible by staining or air brush. The next step in the procedure is to make the half-tone positives from these continuous tone negatives. If the negatives have been properly touched-up, a small amount of local dot etching and filling in the solids should be the only work left to complete the positive. Inasmuch as there is no penciling, air brush or staining on the final positive, we preserve the character of the original.
- b) Another method of making positives for one color work is to make a half-tone negative on film and a contact positive from this half-tone negative.



c) You will note that there are fewer steps required to make a deep etch color job than there are to make an albumen color job. The common method of procedure for making albumen negatives is to make a continuous tone separation, a continuous tone positive on which most of the retouching is done and a final half-tone negative.

6. Assuming that we now have a correct positive, we will proceed to make a deep etch plate.

a) Deep etch may be used on zinc or aluminum, the only difference is the deep etching solution. The same chemical cannot be used to etch both metals.

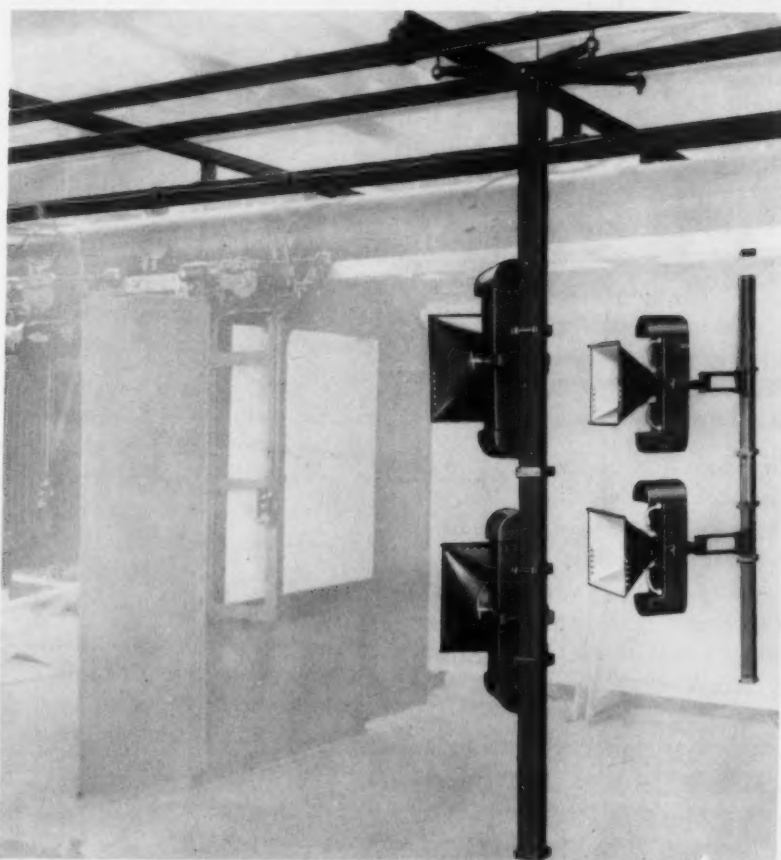
#### 7. Results of Deep Etch.

a) From experience we know that deep etch plates used under normal press conditions will stand up for 200,000 sheets and more. On several occasions plates have been known to run for more than half a million impressions.

b) The consistency of deep etch is that only one method can be followed to properly make a deep etch plate, thereby avoiding the possibility of the plate maker introducing his own tricks as is done with other methods and often proving detrimental. This is no reflection on the plate maker's ability but merely tends to standardize the working method.

c) The standardization is an important factor in eliminating shop errors. The use of prepared solutions made under laboratory conditions is also a help in this direction.

d) Any job can be made with deep etch that can be made with any other process.



## NEW MACBETH OVER-HEAD TRACK MOUNTING OF LAMPS

The latest improved method of overhead lighting for any make of camera. Lamp pendants can be attached to move back and forth with copy board. Equally good for direct or indirect lighting. Illustration shows lamps in position for indirect, positive shot with overhead, dark room camera.

New multiple hinges permit wide spread of light and proper angles of lamp position, as lamps may be drawn back beyond track limits. The counterbalanced lamps can be easily moved up or down, independently or together and of course this hanging arrangement provides more floor space under and around camera bed. Lamps move back and forth on tracks smoothly and easily.

Look into this 1938 method of lighting your copy. We will be glad to furnish further particulars.

# Macbeth

*World's Standard Photo Lamps*

MACBETH ARC LAMP CO. 875 N. 28th St., Philadelphia, Pa.

## Studies in Salescraft

(Continued from page 27)

fellow salesman offers a thought which he hasn't tried, he keeps the card; otherwise, he auctions it off for not less than 25 cents nor more than \$2.

"Getting men out of the office early in the morning is accomplished in one office when the manager, at 9.30 a.m., strikes a gong to notify any office laggards that commissions are made in the prospect's office.

"The ingenuity of men has run rampant in creating visualized devices for showing graphically a man's record in securing orders. Yet one of the simplest, and yet most workable, that ever came to my attention was the plan of a branch sales manager in Rhode Island. In a nutshell: A red carnation is placed on a man's desk when he gets an order, replaced by a white one as soon as payment is made."

The excerpts given reveal that it is possible to issue orders other than through speech or through written communication. Actions speak louder than words—and often suggest more. If we come back to the idea of portfolios kept neatly when other measures fail, the sales manager might do a number of things:

After hours, when the salesmen

are gone, the portfolios should be inspected. The dogeared, soiled sample might be torn up and deposited neatly on top of the portfolio. A heap of confetti could be dumped into a portfolio. And so on.

In addition to the regular sales meeting, if need be, other and brief meetings can be called. These short sessions are worth while when held at short intervals during some drive or project.

We never used a suggestion box, but did call for suggestions during sales meetings. Many invaluable ideas were thus captured and put into practice. Here is how one suggestion worked out:

A salesman thought it would be a good idea if somebody—possibly the chief cutter in the plant—laid aside interesting specimens of jobs as they came through. Someone else could then compile these—in groups pertaining to different lines of businesses.

The thought was carried out—with elaborations. A number of booklets made from black paper stock were made up, 9" x 12" page size. In these were pasted many interesting samples, covering various lines of businesses. These were filed in the sales manager's office and drawn upon by salesmen who had occasion to call on the lines of business represented by these booklets. They were useful, too, when the sales manager

wanted any particular man to specialize in a certain field.

One prime characteristic inherent in all men should be considered by the sales manager. That is the competitive spirit, the urge to beat out the other fellow. A painted board, with spaces to be filled in, a sort of graphic chart showing how the salesmen stand daily in an effort to reach a certain quota is of value. I have found, however, that in photo-offset selling certain angles must be considered, especially where the volume differs with every man.

Therefore, it is best to interview each salesman separately, and have him designate his own quota based on selling volume for the coming month. The sales manager must use judgment and see to it that the self-imposed task is neither too difficult nor too easy. With some men instead of sales volume, I set the month's goal on the basis of opening new accounts.

When the quota board is arranged to show a colored bar indicating progress in terms of percentages, the secret quotas of the individual men are withheld from one another; nevertheless, the quota board is viewed with keen interest daily.

There should be some sort of reward for those who make their quotas: a pair of theatre tickets, some gift, public acclaim at the general sales meeting.

## Lehmann Co. Adds Camera Department



Lehmann Printing and Lithographing Co., 400 Fourth Street, San Francisco, Cal., whose plant and personnel are shown here, recently added a camera department to their facilities. This new department has the most modern equipment to turn out direct color vignettes.

Established in 1901, the Lehmann organization has grown steadily and today it is not only doing a nation-wide business among users of private brand and stock labels of every kind, but it has also worked up a thriving business in foreign countries.

## Stone Quality—Offset Speed

SOUNDS like a pipe dream, doesn't it? And yet in some ways this ideal is an actuality, at least in England, where Alfred Schlesinger has introduced into a number of plants his new process for the preparation of offset plates. It not only adds more speed to the offset process, but results in quality that approximates in many ways the quality of work lithographed from stone.

The following excerpts from an article, "A Lithographic Revolution," published in the British and Colonial Printer and Stationer recently, give some idea of the importance of this new process:

"Despite its great successes, the process of lithography as practised with the use of metal plates has weak points which not only give trouble to its practitioners, but which also tend to hinder the wider adoption of the process. Chief among such weak points can be reckoned: (1) the highly skilled, lengthy and by no means failure-proof operations that go to the obtaining and maintaining of a good printing image on the plate; and (2) the delicate and easily damaged nature of that image when obtained. What a boon . . . if these two factors of the process could be substantially changed for the better!

"It is just this that has been accomplished, according to claims made by Mr. Alfred Schlesinger, the well-known inventor. Mr. Schlesinger's latest invention (for which international patents are pending) relates to the preparation of the litho plate. He uses no bitumen, but has introduced a special greasy medium and a special varnish for which it is claimed that they speed up the plate making process immensely, and moreover give the printed image an almost incredible durability . . .

"Great advantages are claimed also in the printing of the plates made by the new technique. Less water is used, with consequent elimination of much liability to trouble. Less ink, too, is required, with advantage both to economy and quality of printing; half-tones are printed with a remarkably sharp dot. The plate gives extraordinary long life and has lasted out the longest runs on which it has been tried . . ."

### *Another Revolutionary Improvement—the Schlesinger Inking System*

Mr. Schlesinger is the inventor of another important contribution to offset lithography. It is known in England as the Progress Inking System. By means of this System, a much stiffer ink than is usually used, without the addition of ordinary reducers, and far more evenly distributed than is the usual case, is imparted to the plate. The result in many instances is that work done in several colors has the appearance of work done in more colors. This is due to the much greater intensity of the ink and the absence of weakening reducers.

Mr. Schlesinger is now in the United States, with headquarters at Park Central Hotel, New York, seeing a number of leading lithographers and equipment manufacturers, who have become very much interested in his two new inventions.

MAY 1938

## Ask Yourself These Questions

- Is my plant so laid out that the work flows freely, without confusion or lost time?  
Are orders routed so as to reduce idle time to a minimum?  
Has all waste been eliminated?  
Do my cost records tell the whole story?  
Are hourly costs as low as they should be?  
What opportunities are there for reducing costs?  
Am I getting the greatest possible production from employees?  
Is the work so organized that it leaves me time for constructive thinking?  
Are sales efforts properly planned and supervised?  
Is the method of paying salesmen an incentive to them to sell more profitable business?  
What can I do to give better service to customers?

Can you answer all these questions to your own satisfaction? Could you answer them to the satisfaction of a banker?

## A Management Survey

will hold a mirror up to your business. But it will not stop at reflecting its characteristics. It will show you how to strengthen the strong points and how to eradicate the defects. It will point the way to

### Increased Profits Through Better Management

Twenty years of experience in helping management to improve accomplishment can be placed at your disposal for A MANAGEMENT SURVEY OF YOUR BUSINESS.

We will gladly give you details of this service without obligation.

## Hopf, Kent, Willard & Company

Management Engineers & Accountants  
500 FIFTH AVENUE, NEW YORK  
75 FEDERAL STREET, BOSTON



# Copy Preparation

## IN PHOTO-LITHOGRAPHY

By WALTER E. SODERSTROM

**M**ANY of the suggestions given here for preparing copy in photo-lithography are primary and clearly understood by experienced lithographers. There are, however, many newcomers in the industry who have very hazy conceptions of even the most fundamental procedures necessary in preparing copy that will cause the minimum of trouble in the plant and that will result in satisfactory work. The suggestions herein may be helpful to such lithographers . . . and, probably, some of the oldsters might pick up an idea or two!

One of the advantages of the photo-lithographic process is that a customer can produce in composite form, in either enlarged or reduced size, material which has been used in other places.

You are all well acquainted with presentation portfolios, broadsides, testimonial letters and the like, containing reproductions of clippings from magazines and newspapers, also graphs and photographs. It is this kind of work which makes necessary a copy preparation department in a photo-lithographic plant. The men and women making up a copy preparation department usually are young people who have taken an art course somewhere, or those artistically inclined who are getting their first experience.

The duty of a copy preparation department is to assemble material received from a customer and prepare it for a minimum of work and the best results in the camera department and when used by the customer.

Tools used in copy preparation are practically the same as are found in any art department—drawing table, T-square, rubber cement, razor blade, scissors, art gum and India ink. The help necessary for a copy preparation department is

not highly skilled. However, when pay day rolls around, there is a very definite payroll cost incurred which must be passed on to the customer.

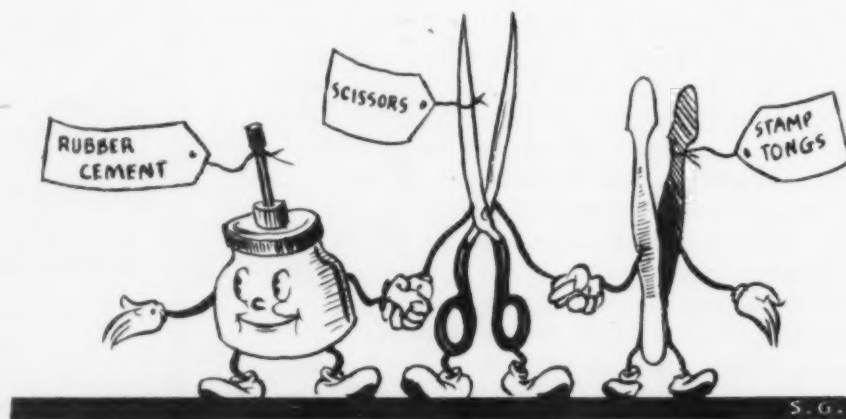
The paste-up artist and the lithographing photographer find it necessary to work hand in hand in preparing a paste-up for the shooting of the completed page. The artist should know the necessary requirements of the photographer and make it as simple as possible for him to go ahead with his work. Many an offset photographer has found himself swearing at an artist because of his lack of understanding in the necessary steps to preparing his copy. Accuracy, distinct type and clear photographs are essential. Understanding the effect of erasures and blocking out, pencil lines, and the cleaning of the job are of the greatest importance. An artist preparing a paste-up for photo-offset should understand these details thoroughly.

The photographer's primary demand of the artist, in preparing a paste-up for lithographing, is an important one . . . namely, accuracy. An  $8\frac{1}{2} \times 11$  working page should be  $8\frac{1}{2} \times 11$ , and not a 32nd of an inch more or less. These accurate measurements are particularly necessary because a slight deviation from the required size may cause a serious unbalancing of the entire page.

The T-square and triangle should be the basis for all measurements. Using these implements will guarantee an accurately squared job. In drawing the margins for the page, the right angle intersections should be darker than the rest of the line. This emphasis at the corners is convenient for the photographer for he can then pick up this very dark pencil line in the shooting of the paste-up. This emphasis is also a check on just how much a negative may stretch or shrink, whichever the case may be.

The proofs used on the paste-up should be very distinct. Type matter should not be smudged and photos should be clearly focused half-tones. A very helpful medium in drying proofs that have just come off the press is the use of magnesium powder. This powder dries the ink quickly and can easily be brushed off with absorbent cotton. Any pictures used from newspapers do not reproduce well. They are too indistinct to be rephotographed. It is best, therefore, to use original photos whenever it is possible.

In pasting-up rubber cement is the only efficient kind of adhesive. It does not wrinkle the paper and, should there be necessary any moving of copy or pictures, the proofs can easily be removed without tearing. This is credited to the plasticity of



THE PHOTO-LITHOGRAPHER



the New  
**CRAMER  
PANACHROME  
PLATE**

*A New and Better Plate*

For the Color Lithographer.

A new panchromatic plate — rapid, fully color sensitive, long gradation, wide latitude in manipulation. A plate produced to enable the color lithographer to obtain better reproductions at a lower cost of production. Details gladly sent on request.

**G. CRAMER DRY PLATE CO.**

Lemp and Shenadoah Aves.  
ST. LOUIS

9 E. 19th Street  
NEW YORK

608 S. Dearborn St.  
CHICAGO

# EQUAPO

"ANOTHER TRIANGLE TRIUMPH"

## A NEW OFFSET BLACK THAT GIVES AMAZING RESULTS

This brand-new Offset Black Ink our chemists have recently perfected has a density that will surprise you. It works smoothly on the press; has all the coverage you expect; dries quickly, yet does not tone down; gives to solids that rich, velvety effect your customers like, yet prints type and

fine details of halftones as clean and sharp as could be desired. Test out EQUAPO on the next job for a fussy customer. You will then agree that it is the finest offset black that has ever been produced with complete opacity, richness of tone, yet moderately priced.

Two other inks we have at last perfected and offer to the lithographic trade as the best of their kind are a Permanent Persian Orange and a Transparent Permanent Yellow. These will not drop out, and are free from those defects you may have encountered in other yellow and Persian orange inks. Test out these inks, too, and you will be agreeably surprised at the results they give.

**TRIANGLE INK and COLOR CO. INC**

*Manufacturers of Fine Litho & Printing Inks for All Purposes*

*Service Offices*  
219 W. FRANKLIN ST., BALTIMORE, MD.  
231 CONGRESS STREET, BOSTON, MASS.  
1036 BEAUBIEN ST., DETROIT, MICH.  
13 SOUTH 3RD STREET, ST. LOUIS, MO.



*Main Office & Factory*  
26-30 FRONT STREET, BROOKLYN, N. Y.  
Telephone Triangle 5-3770-71

the rubber cement. Any superfluous paste can be rubbed off with the finger. A helpful trick in the removal of superfluous rubber cement is to accumulate the excess paste, roll it into a wad, and then use it as an eraser to remove the cement.

Glue is taboo! It wrinkles and excess cannot be removed without defacing the copy. Experience has proved that any attempts at erasures of copy in offset typing usually result in blurring. This is caused by the destruction of the surface texture of the paper, which is inevitable in all erasures. Therefore, the most efficient and feasible method to remedy the error is to replace the misspelled word with a facsimile pasted exactly over it.

The use of red cellophane paper is another helpful detail that has eliminated the trying, long drawn-out, "blocking out" of an area with ink. When we think of blocking out with ink . . . first drawing the outline with a ruling pen, then filling in the area with a brush and then wasting so much time while waiting for the ink to dry, we hail with joy the highly advantageous innovation of red cellophane as an efficient time-saver for any block out work. It is much simpler to outline with pencil the area to be blocked out, then to evenly spread rubber cement over this area. Cut the red cellophane so that it will overlap the area and then paste it down by smoothing it evenly until it adheres to the page. By placing a ruler exactly coinciding with the penciled outline, a razor blade can be used to cut exactly on the square. This entire operation can be completed in a comparatively short time and with much more efficiency as compared to the, by far, lengthier and more laborious inking method. Using black paper is also as inefficient as ink and does not compare to the use of red cellophane in blocking out.

It is interesting to note that red will photograph black and blue will not photograph at all. It is convenient, therefore, to request the proof-reader to make all annotations and corrections with blue pencil.

An ordinary paint brush with soft bristles is an aid to brushing off

the completed job. It removes, without destroying the copy, unnecessary specks of paste and dust. A stray dust speck has been the cause of much aggravation. A small dot of rubber cement had been overlooked both by the paste-up artist in brushing off the copy and by the stripper in opaquing the negative. Consequently, a lower case "i" had been made into an "r", thereby changing the entire significance of a sentence. As a result the copy, part of a beauty treatment ad, which should have read "There is no need for an unpleasant *wait* when you come to us for facial treatments," instead read, "There is no need for an unpleasant *wart* when you come to us for facial treatments." Although this particular oversight had a humorous sequel, others can result far more disastrously; consequently, it is obviously quite essential that all paste-up be thoroughly brushed, to avoid any such embarrassing pre-

dicament as that just mentioned.

Looking at the paste-up completely assembled as a whole page, it is important that all copy be well away from the edge of the trimmed sheet. This forestalls any possible deletion of copy or of unbalancing the margin in the trimming of the job.

Discretion must be used in the assembling of copy on the page. If the dummy should designate a certain amount of space for copy and if, upon examination, it should appear that the final composition does not fill the space allotted, it rests upon the judgment of the paste-up artist to place the copy so as to balance the rest of the page.

This brief exposition of the different operations in "paste-up" work is but a sketchy résumé of a few of the many steps necessary for the completed job. The experienced paste-up artist has many more methods for the performance of his work.



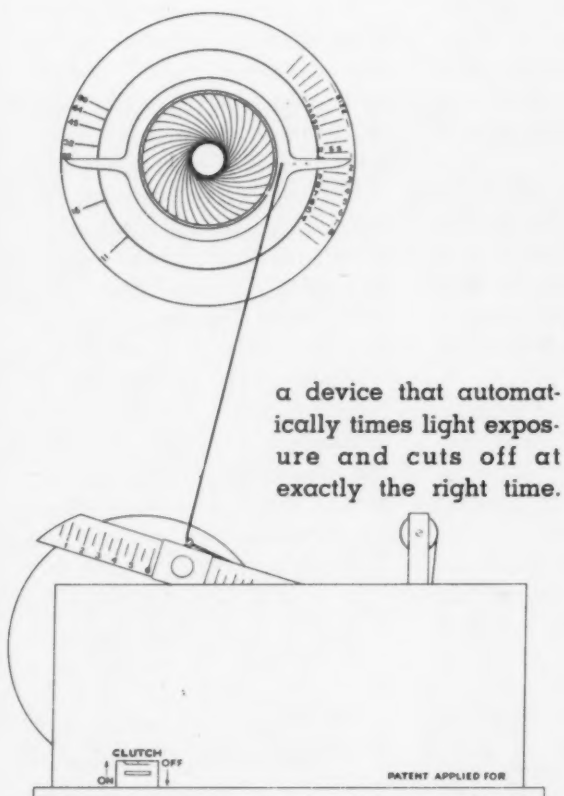
"And look, I want this much white space between lines!" One of the thorns in the flesh of the copy preparation department.

THE PHOTO-LITHOGRAPHER



**The Automatic  
HALFTONE  
DIAPHRAGM CONTROL**  
*is especially helpful*

- to insure quality;
- to increase production;
- to secure uniform results;
- to reduce length of exposures;
- to prevent film waste;
- to save camera man's time;
- to increase the camera man's faith in himself.



The Automatic Diaphragm Control will be demonstrated any time, by appointment, in our plant. Specimen sheets on request.

**R. P. NEWICK**  
187 SYLVAN AVE. NEWARK, N. J.

**● HUNT**  
**OFFERS A COMPLETE  
LINE OF CHEMICALS  
for the LITHOGRAPHER**

Listed below are twelve of our most widely used chemicals for the Lithographic Industry. Like all Hunt products they are carefully pre-tested and of such uniform quality that they always give the same results. Complete catalogue and price list on request.

**Glycerine C.P.**

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**Rubber Solution**

**Negative Collodion**

**Stripping Collodion**

**Gum Arabic Selected**

**Litho Developing Ink**

**Edible Hen Egg Albumen**

**Paraformaldehyde U. S. P.**

**Sodium Carbonate Photo Pure**

**National Photographic Carbons**

**Sodium Sulphite Anhydrous Photo**

**PHILIP A. HUNT COMPANY**

2432 LAKESIDE AVE.  
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EST.  
1909

1076 W. DIVISION ST.  
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253-261 RUSSELL ST.  
BROOKLYN, N. Y.

111 BINNEY STREET  
CAMBRIDGE, MASS.



The best by test for  
every lithographic  
purpose

*Offset*  
**GLOSS INKS**

Excellent for most purposes,  
but especially suitable for  
labels and large displays re-  
quiring brilliancy, smooth lay-  
ing of color, and fastness to  
light.

**MONROE  
DRIER**

Prepared especially and  
adapted for Albumin Process.  
Does not attack plate. Re-  
tards bronze from catching.  
Does not change consistency  
of ink. Does not cause phys-  
ical or chemical change in  
rollers.

A compounded two-way  
drier, drying from the bottom  
up and from the top down.  
Works well in both black  
and colors.

#### **Caution**

Higher priced inks require  
less — cheaper inks a little  
more

**GRADY & NEARY  
INK COMPANY**  
119 WEST HARRISON ST.  
CHICAGO, ILL.

## **SALES IDEAS IN DISPLAY SURVEY**

By **WILLIAM ROBINS**

**P**HOTO-LITHOGRAPHERS have much to gain from the Window Display Circulation and Market Coverage Report, published several months ago, particularly those who are interested in getting orders for all types of window and counter displays that call for quantity runs that permit greatest economy in cost when done by photo-lithography.

As mentioned in an earlier issue of *The Photo-Lithographer*, the Report was prepared by the Advertising Research Foundation of the Association of National Advertisers and the American Association of Advertising Agencies, with the cooperation of the Lithographers National Association.

A fund of over \$44,000 was contributed by these and other interested groups and individuals. The Report is in book format, size 11" x 14", and includes 88 pages, with many charts and maps.

John Paver, outstanding authority in traffic and trade operations for the outdoor advertising industry and other interests, conducted the field operations in this survey in nineteen selected cities and communities in all parts of the country.

Pedestrian traffic on the sidewalks near each display space was the sole count taken. The hours of 6 a. m. to 12 midnight—an eighteen hour day—constituted the basis of display time and circulation.

For convenience in figuring the number of display spaces available in a given city or town, each was classified by the traffic count in markets or "business districts" of relative "sales" importance:—

Central Business District;  
Secondary or Surrounding Busi-  
ness District;  
Neighborhood District;  
Outlying District.

The population of the city or town is not, this report significantly emphasizes, the basis of measuring the relative importance of a "business district" or its sales.

The mobility, or actual daily traffic of resident population passers-by, plus visiting customers from all "business districts" and distant cities and towns, makes up the true count of a particular store's traffic on its sidewalk.

In each "business district" a count has been made of all available window display spaces. The total number of available spaces are grouped into ten displays each, such group of ten displays being regarded as a "display district."

Such fine tooth-combing, such simple definition of each store's true display circulation, has never before been compiled.

With a choice of 1, 2, 3, or 4 displays to be selected from the 10 display spaces in a "display district," the advertiser can determine the degree of intensity his budget and other factors will allow him to make.

With one display in each "display district" it has been estimated in the survey that 25% of the market may be reached. Two displays will reach 50%, three displays 75%, and four displays 100%.

Hence, with the number of displays required to accomplish a specific advertising and sales result known, the photo-lithographer can properly consult with window advertisers as to the correct quantity of displays required in specific campaigns.

In articles to follow the writer will endeavor to present the sales opportunities to be derived from the display survey.

#### **Medal Award to L.N.A.**

*"For a research project which has been conspicuous in advancing the knowledge and science of advertising"—meaning the Window Display and Market Coverage Report—the Lithographers National Association won, for its important part in making the research, an award in the Annual Advertising Awards Contest.*

**THE PHOTO-LITHOGRAPHER**

# "Where-to-Buy-It"

This Handy Reference Department is a regular monthly feature of THE PHOTO-LITHOGRAPHER. It is an accurate guide to reliable firms.

Listings are carried at the rate of One Dollar Per Line per Month or Ten Dollars a Year Payable in Advance.

## ACCOUNTANTS

KROMBERG, J., & ASSOCIATES, C. P. A.'s, 461 Eighth Ave., New York, N. Y.  
LEVESS, HERBERT H., C. P. A., 360 W. 23rd St., New York, N. Y.  
REINISH, SAMUEL S., C. P. A., 2 Lafayette St., New York, N. Y.

## ACIDS

CALIFORNIA INK Co., Inc., 545 Sansome St., San Francisco, Calif.  
MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.  
PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

## ADDRESSING AND MAILING SERVICES

ARDLEE SERVICE, Inc., 28 W. 23rd St., New York, N. Y.  
GRAY LETTER SHOP, JAMES, 216 E. 45th St., New York, N. Y.

## AIR CONDITIONING EQUIPMENT

OFFEN, B., & Co., 608 S. Dearborn St., Chicago, Ill.

## ALUMINUM PLATES

(See Plates-Aluminum-Zinc)

## ALBUMEN

CALIFORNIA INK Co., Inc., 545 Sansome St., San Francisco, Calif.  
HOLLAND, THOR, 7048 Jones Ave., N. W., Seattle, Wash.  
HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.  
INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.  
NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.  
PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

## AMMONIUM DICHROMATE

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

## ARC LAMPS (See Lamps—Arc)

## ASPHALTUM

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

## ARTISTS' SQUARES

ZOLTAN, JOHN M., 833 Lyman Ave., Oak Park, Ill.

## ARTISTS' SUPPLIES

PEERLESS BLUE PRINT Co., THE, 347 Fifth Ave., New York, N. Y.

## BELLOWS

UNITED CAMERA Co., Inc., 1515 Belmont Ave., Chicago, Ill.

## BINDINGS

PLASTIC — BREWER - CANTELMO Co., Inc., 118 E. 27th St., New York, N. Y.  
WIRE-O—TRUSSEL MFG. Co., Poughkeepsie, N. Y. (See list of licensees in display advertisement)

## BLANKETS

BAINBRIDGE, PHILIP M. (Goodrich Rubber Blankets), 95 Madison Ave., New York, N. Y.  
CALIFORNIA INK Co., Inc., 545 Sansome St., San Francisco, Calif.  
IDEAL ROLLER & MFG. Co., 2512 W. 24th St., Chicago, Ill., and 21-24 39th Ave., Long Island City, N. Y.  
INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
RAPID ROLLER Co., Federal at 26th, Chicago, Ill.  
ROBERTS & PORTER, Inc., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.  
SINCLAIR & CARROLL Co., Inc., 591 11th Ave., New York, N. Y.  
SINCLAIR & VALENTINE Co., 11 St. Clair Pl., New York, N. Y.  
VULCAN PROOFING Co., 58th St. and First Ave., Brooklyn, N. Y.

## BRONZERS

CHRISTENSEN MACHINE Co., Racine, Wis.  
HENSCHEL MFG. Co., Milwaukee, Wis.

## CAMERA CONTROLS

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

## CAMERAS

AGFA-ANSCO CORP., Binghamton, N. Y.  
CALIFORNIA INK Co., Inc., THE, 545 Sansome St., San Francisco, Calif.

EASTMAN KODAK Co., Rochester, N. Y.  
LANSTON MONOTYPE MACHINE Co., 24th at Locust, Philadelphia, Pa.  
LEVY, MAX, & Co., Wayne & Berkley Sts., Philadelphia, Pa.  
LITHO EQUIPMENT & SUPPLY Co., 215 W. Ohio St., Chicago, Ill.  
MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.  
NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.  
OSTRANDER-SEYMOUR Co., THE, 1870 S. 54th Ave., Cicero Sta., Chicago, Ill.  
PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.  
REPRO-ART MACHINERY Co., Wayne Ave. & Berkley St., Phila., Pa.  
ROBERTSON, R. R., 400 W. Madison St., Chicago, Ill.  
RUTHERFORD MCHY. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.  
SULLEBARGER, E. T., Co., 116 John St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.  
WESEL MFG. Co., 468 Fourth Ave., New York, N. Y., and Scranton, Pa.  
ZEISS, CARL, INC., 485 Fifth Ave., New York, N. Y.

## CARDBOARDS AND BRISTOLS

MEAD SALES Co., THE, 230 Park Ave., New York, N. Y.  
WHEELWRIGHT PAPERS, INC., 230 Park Ave., New York, N. Y.

## CARBON (ARC LAMP)

PEASE Co., C. F., THE, 2601 W. Irving Park Road, Chicago, Ill.

## CARBON PAPER RIBBONS

REMINGTON RAND, Buffalo, N. Y.

## CARBONS

NATIONAL CARBON Co., Cleveland, O.

## CARBONS—Photographic

HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.  
NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.  
SULLEBARGER, E. T., Co., 116 John St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

## CHEMICALS

AGFA-ANSCO CORP., Binghamton, N. Y.  
CALIFORNIA INK Co., Inc., THE, 545 Sansome St., San Francisco, Calif.



DEFENDER PHOTO SUPPLY Co., Rochester, N. Y.

DOM, G. C., SUPPLY Co., Cincinnati, O.  
EASTMAN KODAK Co., Rochester, N. Y.

HUNT, PHILIP, A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

LA MOTTE CHEMICALS PRODUCTS Co., 438 Light St., Baltimore, Md.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

MERCK & Co., Inc., Rahway, N. J.

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

PHILLIPS & JACOBS, 622 Race St., Phila., Pa.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

SIEBOLD, J. H. & G. B., Inc., 47 Watts St., New York, N. Y.

#### COLOR CONTROL AND MEASURING EQUIPMENT

HUEBNER LABORATORIES, 202 E. 44th St., New York, N. Y.

#### COMPOSITION

LITHART TYPOGRAPHIC SERVICE, 228 E. 45th St., New York, N. Y.

MONSEN, THORMOD, AND SON, Inc., 740 N. Franklin St., Chicago, Ill.

#### COMPOSING MACHINES

COXHEAD, RALPH C., CORP., 17 Park Place, New York, N. Y.

#### CRAYONS-Litho

INTERNATIONAL PRINTING INK CORP., The, 636 11th Ave., New York, N. Y.

KORN, WM., Inc., 260 West St., New York, N. Y.

ROBERTS & PORTER, Inc., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

#### DAMPENING DEVICES

GOODRICH, B. F., Co., The, Akron, O.  
INTERNATIONAL PRESS CLEANER & MFG. Co., The, 112 E. Hamilton Ave., Cleveland, O.

WAGNER, CHARLES, LITHO MCHY. Co., 51 Park Ave., Hoboken, N. J.

#### DAMPENING ROLLER COVERS

GODFREY ROLLER COMPANY, 211 N. Camac St., Phila., Pa.

#### DEEP ETCH SUPPLIES

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SCHULTZ, H. J., 2230 N. Racine Ave., Chicago, Ill.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

#### DICHROMATE—Ammonium Photo Granular

HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

#### DIE-CUTTING MACHINE—Semi-Automatic

KRAUSE, KARL, U. S. Corp., 55 Vandam St., New York, N. Y.

#### DRYERS

CARTER, C. W. H., 100 Varick St., New York, N. Y.

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

SINCLAIR & VALENTINE Co., 11 St. Clair Pl., New York, N. Y.

#### DRYERS—Photo Print

SIMPLEX SPECIALTY Co., Inc., 206 E. 33rd St., New York, N. Y.

#### DRYING OVENS

ZARKIN MACHINE Co., Inc., 335 E. 27th St., New York, N. Y.

#### DYNAMOS—MOTORS—PRESS DRIVES AND ELECTRICAL CONTROL EQUIPMENT

AMERICAN TYPE FOUNDERS SALES CORP., 200 Elmora Ave., Elizabeth, N. J.

CLINE-WESTINGHOUSE, Chicago, Ill.

CUTLER-HAMMER MFG. Co., 315 N. 12th Ave., Milwaukee, Wis.

GENERAL ELECTRIC Co., Schenectady, N. Y.

KIMBLE ELECTRIC Co., W. 14th St. & S. Damen Ave., Chicago, Ill.

NORTHWESTERN ELECTRIC Co., 408 S. Hoyne St., Chicago, Ill.

ROBBINS & MEYERS, Inc., Springfield, Mo.

WESTINGHOUSE ELECTRICAL & MFG. Co., E. Pittsburgh, Pa.

#### ENVELOPES

DAYTON ENVELOPE Co., Dayton, O.  
STERLING TAG Co., 1600 E. 30th St., Cleveland, O.

#### ETCHES

INTERNATIONAL PRINTING INK CORP., The, 636 11th Ave., New York, N. Y.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

#### FADE-O-METER

ATLAS ELECTRIC DEVICES Co., 361 W. Superior St., Chicago, Ill.

#### FILMS

AGFA ANSCO CORP., Binghamton, N. Y.  
CALIFORNIA INK Co., Inc., The, 545 Sansome St., San Francisco, Calif.

EASTMAN KODAK Co., Rochester, N. Y.

GEVAERT Co. OF AMERICA, Inc., The, 423 W. 55th St., New York, N. Y.

HALOID Co., The, 6 Haloid St., Rochester, N. Y.

HAMMER DRY PLATE & FILM Co., Ohio Ave. & Miami St., St. Louis, Mo.

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

#### FLANNEL

FUCHS & LANG MFG. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

GEVAERT Co. OF AMERICA, Inc., The, 423 W. 55th St., New York, N. Y.

INTERNATIONAL PRINTING INK CORP., The, 636 11th Ave., New York, N. Y.

ROBERTS & PORTER, Inc., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

#### FOLDING MACHINERY

BAUM, RUSSELL ERNEST, 615 Chestnut St., Phila., Pa.

DEXTER FOLDER Co., 28 W. 23rd St., New York, N. Y.

#### GLYCERINE

HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

#### GRAINING FLINT

INTERNATIONAL PRINTING INK CORP., The, 636 11th Ave., New York, N. Y.

NEW ENGLAND QUARTZ Co. OF NEW YORK, 450 7th Ave., New York, N. Y.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

#### GRAINING AND REGRAINING—Zinc, Aluminum, Glass and Multilith Plates

CHICAGO LITHO PLATE GRAINING Co., 214-16 N. Clinton St., Chicago, Ill.

ILLINOIS PLATE GRAINING Co., Inc., 913-921 W. Van Buren St., Chicago, Ill.

INTERNATIONAL PRINTING INK CORP., The, 636 11th Ave., New York, N. Y.

LITHOGRAPHIC PLATE GRAINING Co. OF AMERICA, Inc., 41 Box St., Brooklyn, N. Y.

MADDOX LITHOPLATE GRAINING CORP., 503 S. Jefferson St., Chicago, Ill.

McKENNA, JAMES J., 1015 Callowhill St., Phila., Pa.

NATIONAL OFFSET SUPPLY Co., 613 N. Broadway, St. Louis, Mo.

PHOTO-LITHO PLATE GRAINING Co., Inc., 1207 S. Highland St., Baltimore, Md.

RELIABLE LITHOGRAPHIC PLATE Co. Inc., 17 Vandewater St., New York, N. Y.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

WESTERN LITHO PLATE & SUPPLY Co., 1019 Souard St., St. Louis, Mo.

#### GRAINING MACHINES

FRICTSHE, R., 145 Hudson St., New York, N. Y.  
HOE, R., & Co., Inc., 910 E. 138th St., at East River, New York, N. Y.  
McKINLEY LITHO SUPPLY Co., 1600 John St., Cincinnati, O.  
ZARKIN MACHINE Co., 335 E. 27th St., New York, N. Y.

#### GRAINING QUARTZ FLINT

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
NEW ENGLAND QUARTZ Co. of New York, 450 Seventh Ave., New York, N. Y.

#### GUM ARABIC

HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.  
INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

#### HAND ROLLERS

ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.  
SIEBOLD, J. H. & G. B., INC., 47 Watts St., New York, N. Y.

#### HUMIDIFICATION

CARRIER ENGINEERING Co., Syracuse, N. Y.  
SOUTHWORTH MACHINE Co., 30 Warren Ave., Portland, Me.

#### HYDROQUINONE

HUNT, PHILIP A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.  
MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.  
NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

#### INK COMPOUNDS

INDIANA CHEMICAL & MFG. Co., Indianapolis, Ind.; New York City, N. Y., and Chicago, Ill.

#### INKS

ACHESON INK Co., INC., 142 Skillen St., Buffalo, N. Y.  
ACME PRINTING INK Co., 1315 W. Congress St., Chicago, Ill.  
AMERICAN PRINTING INK Co., Div. General Printing Ink Corp., 2314 W. Kinzie St., Chicago, Ill.

AUGUST, CHARLES, CORP., THE, 416 Orleans St., Chicago, Ill.  
BLACKER, H., PRINTING INKS, INC., 304 Lock St., Cincinnati, O.  
BOWERS PRINTING INK Co., 711 W. Lake St., Chicago, Ill.  
BRADEN-SUTPHIN INK Co., 3700 Chester Ave., Cleveland, O.  
CALIFORNIA INK Co., 545 Sansome St., San Francisco, Calif.  
CEB PRINTING INK Co., 817 Washington Blvd., Chicago, Ill.  
CRESCENT INK & COLOR Co. of PENNA., THE, 464 N. 5th St., Phila., Pa.  
DRISCOLL, MARTIN, & Co., 610 Federal St., Chicago, Ill.  
FLINT, HOWARD, INK Co., 2545 Scotten Ave., Detroit, Mich.  
FUCHS & LANG MFG. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.  
GAETJENS, BERGER & WIRTH, INC., 35 York St., Brooklyn, N. Y., and 538 S. Clark St., Chicago, Ill.  
HERRICK, WM. C., INK Co., INC., 325 W. 34th St., New York, N. Y.  
HILL-HENTSCHEL Co., 3928 Clayton Ave., St. Louis, Mo.  
HUBER, J. M., INC., 460 W. 34th St., New York, N. Y.  
INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.  
JOHNSON, CHARLES ENEU, & Co., INC., 10th & Lombard Sts., Phila., Pa.  
KOHL & MADDEN PRINTING INK Co., 731 Plymouth Court, Chicago, Ill.  
LEVEY, FREDERICK H., Co., INC., 1223 Washington Ave., Phila., Pa.  
MAYER, ROBERT, Co., INC., 1107 Grand St., Hoboken, N. J.  
PRESCOTT, H. S., 238 Dwight St., Springfield, Mass.  
ROBERTS, LEWIS, INC., 72 Union St., Newark, N. J.  
ROOSEN, H. D., Co., Ft. 20th-21st St., Brooklyn, N. Y.  
SCHWARM & JACOBUS Co., THE, 1216 Jackson St., Cincinnati, O.  
SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.  
SIEBOLD, J. H. & G. B., INC., 47 Watts St., New York, N. Y.  
SINCLAIR & CARROLL Co., INC., 591 11th Ave., New York, N. Y.  
SINCLAIR & VALENTINE Co., INC., 11-21 St. Clair Pl., New York, N. Y.  
SLEIGHT METALLIC INK COMPANIES, INC., 538 N. Third St., Phila., Pa.  
SUPERIOR PRINTING INK Co., INC., 295 Lafayette St., New York, N. Y.  
TRIANGLE INK & COLOR Co., INC., 26 Front St., Brooklyn, N. Y. (also Boston, Mass., Baltimore, Md., and St. Louis, Mo.).  
WILLIAMS, R. S., Co., INC., 257 W. 17th St., New York, N. Y.  
WINSLOW INK CORP., 124-132 White St., New York, N. Y.

#### INK WAX REDUCER (Smoothol Ink Wax)

SMITH, FRANCIS X., Co., 952 E. 93rd St., Brooklyn, N. Y.

#### INSURANCE—Workmen's Compensation

N. Y. PRINTERS & BOOKBINDERS MUTUAL INSURANCE Co., 147 Fourth Ave., New York, N. Y.

#### LAMPS, Arc

ATLAS ELECTRIC DEVICES Co., INC., 361 W. Superior St., Chicago, Ill.  
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MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.  
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## Uses for Glycerine

The following suggested uses for glycerine, taken from the Bulletin of Glycerine Producer's Association, may be of interest to photo-lithographers:

### *Glass Marking Ink With Simple Glycerine Formula*

When an ink-marking on glass is desired, an effective ink for this purpose is easily made with the following formula:

Glycerine.....	40
Barium sulfate.....	15
Ammonium bifluoride....	15
Ammonium sulfate.....	10
Oxalic acid.....	8
Water.....	12

All parts by weight. The viscosity may be adjusted with water. Use the mixture in a hood or a well ventilated room. To speed the action, up to 5% of sodium fluoride may be added.

Glycerine is extensively used in the manufacture of practically all types of inks because of its solvent properties and its unique power of absorbing and retaining moisture.

### *For Carbolic Acid Burns*

In laboratories where phenol (carbolic acid) is much used, it is recommended that a glycerine solution should always be kept on hand to treat the burns which often occur. The preparation is made by saturating chemically pure glycerine with bromine. The fluid is kept in a glass-stoppered bottle. In case of a phenol burn, apply this preparation quickly. An instantaneous reaction occurs between the phenol and the bromine in the glycerine.

### *To Recondition Rubber Articles*

Another helpful application which has been reported for glycerine in the laboratory is borrowed from the rubber industry where glycerine is used extensively in various points of processing, and concerns the reconditioning of rubber articles of laboratory usage which have grown hard and lost their elasticity owing to storage under conditions of warm dry heat or extreme cold.

Practically all rubber articles, it is claimed by users, may be softened with little difficulty by a simple proc-

ess. First cleanse the article by scrubbing thoroughly with a brush dipped in warm water and place in a solution of one part of ammonia to two parts of water, allowing it to remain an hour or so until the ammonia has evaporated. Then rinse the article with a dilute solution of glycerine and water, wipe off and dry, and store in a cool spot away from the light.

### **"Robbery by Mail"**

Karl Baarslag has combined in one volume, "Robbery by Mail," the qualities of a bang-up good detective story and a first-class job of reporting. This book, recently published by Farrar & Rinehart, New York, contains a collection of exciting stories of crime by way of the mail, and how the Federal postal inspectors have made such misuse of the mails a very dangerous business, indeed.

"Robbery by Mail" tells the story of the U. S. Postal Inspection Service in a way that makes truth seem not only stranger than fiction, but also just as interesting.

## RELIABLE LITHOGRAPHIC PLATE CO., Inc.

*The Pioneer  
Plate Grainers  
of America*

INCORPORATED 1916

*Reliability  
Plus Service!*

**"RELIABLE"** is far more than just part of our name. It means to our customers that our plates can be depended on to give first-class results because from start to finish the grain-ing is handled by experts of long experience. Our plates are made right to work right—they are reliable!

**ALL PLATES, INCLUDING THOSE REGRAINED FOR MULTILITH, ARE MARBLE GRAINED**

We carry a full supply of Zinc and Aluminum Sheets for Offset, Rotaprint and Rotary Presses, in fact for all the lithograph trade.

A trial order should "sell" you our services and products.

**RELIABLE LITHOGRAPHIC PLATE CO., INC.**

17-27 Vandewater St. and 45 Rose St., New York, N. Y. • Phone: BEekman 3-4531



## THINKING OUT LOUD

By W. E. S.

**I**F it is sensible for the photo-offset lithographer to make a bid for business by advertising that he can produce printed material in a less expensive way because there will be "no cuts, no lead, no type, no electrotypes, no mistakes," then it is just as sensible for the letterpress printer to advertise that his process requires no plate-graining, no pasting-up of copy (in which mistakes can easily occur!), no chemical formulas, etc., etc.

The answer of the prospect to this kind of advertising is most likely to be a very positive "So What!"

It is quite true that photo-offset, especially when used for the production of combination sheets, can result in substantial savings when small quantities of simple black and white reproductions are wanted. It is just as true that such work forms only a small part—and the least profitable—of the business handled by some photo-offset establishments, and it

seems the height of short-sightedness and poor policy to advertise the photo-offset process in such a way that buyers will consider it only as a process to turn out cheap work when the price of other kinds of printing cannot be afforded.

The photo-offset process has resulted in some of the most attractive pieces of printed material ever turned out. In some cases it was selected because it was able to obtain effects that could not be obtained as well by other processes and was not, necessarily, cheaper. In other cases it was selected because it was able to get a desired effect at less cost, but without enhanced attractiveness over other processes.

The sooner photo-offset lithographers start to advertise their process as the most desirably process for many kinds of work—not for all kinds of work—and advertise in that way because they honestly believe what they are saying, based on having

actually produced superior work by photo-offset, the sooner will come the day when many more discriminating buyers will consider photo-offset as the best process to do many particular jobs, and not on the basis of "no cuts, no lead, no type, no electrotypes, no mistakes!"

### New Blood in Pagano

William F. Barr, Tommy Thompson and Neil O'Keeffe are now associated with Pagano, Inc., New York, advertising art and photography, in the following capacities:

Mr. Barr, sales and contact; Mr. Thompson, lettering and design; Mr. O'Keeffe, illustrator.

The Hilo Varnish Corporation, Brooklyn, recently sent out bulletins describing their new Sparkle Rip-pl metallic finishes, and Trans-Lux Metallic Colored Lacquer.

## SINCLAIR & CARROLL INKS MAKE FOR GOOD RESULTS

Throughout the country in hundreds of pressrooms Sinclair & Carroll inks are being chosen for their all around dependability and good color strength. These inks are supervised in their formulation and manufacture by men whose first consideration is the well being of this business. The uniformity of these inks is safeguarded for you. The Sinclair & Carroll label on your ink container is an added guarantee of good printed and lithographed results. We will welcome the opportunities you afford us to serve you constructively on your requirements.

## SINCLAIR & CARROLL CO., Inc.

PRINTING

INKS

LITHO

591-3-5 ELEVENTH AVENUE - Tel. BRyant 9-3566

NEW YORK CITY

CHICAGO: 440 West Superior Street, Tel. Superior 3481  
NEW ORLEANS, LA.: 518 Natchez Street, Tel. Main 4481

LOS ANGELES, CAL.: 417 E. Pico Street, Tel. Prospect 7896  
SAN FRANCISCO, CAL.: 345 Battery Street, Tel. Garfield 5834

# Adena offset

## WITH DUAL CONTROL

Consider the importance of Dual Control to you! Now you are able to put Adena on the press right from case or skid. Now you "cut corners" . . . forestall worries and experiments . . . save time usually wasted.

The "automatic control" of the moisture content while Adena is being made, and throughout entire process of sheeting, sorting, packing, assures you a uniformly high quality sheet.

ADENA IS  
TUB-SIZED  
LIES FLAT  
WILL NOT  
CURL



Save Money by  
Shipping via  
Miami Valley  
Shippers' Assn.

**THE CHILlicOTHE PAPER COMPANY**  
Makers of Quality Offset, Lithograph and Book Papers

Executive Offices and Mills: CHILlicOTHE, O.

Eastern Office:  
New York, N. Y.  
41 Park Row

Sales Offices:

Pacific Coast Office:  
Los Angeles, Calif.  
1003 N. Main St.

CHILlicOTHE—a buy-word for high grade papers

## SUPERIOR CHEMISTRY

### INSPIRED SUPERIOR PACKING . . .

For your convenience the research done by the Mallinckrodt Packaging Department has kept pace with our chemists in producing Physically-Perfected as well as Chemically-Perfected chemicals for the lithographic industry. For example—

#### 1 SLOPING SHOULDERS

bottles from which the last grain will flow without shaking or scraping.

#### 2 THE PLASTIC CAP

doing away with broken corks and sticking caps.

#### 3 THE BELL CLOSURE

for acids and ammonia water. Liquid-tight, gas-tight, interchangeable. A turn of the cap opens or closes bottle.

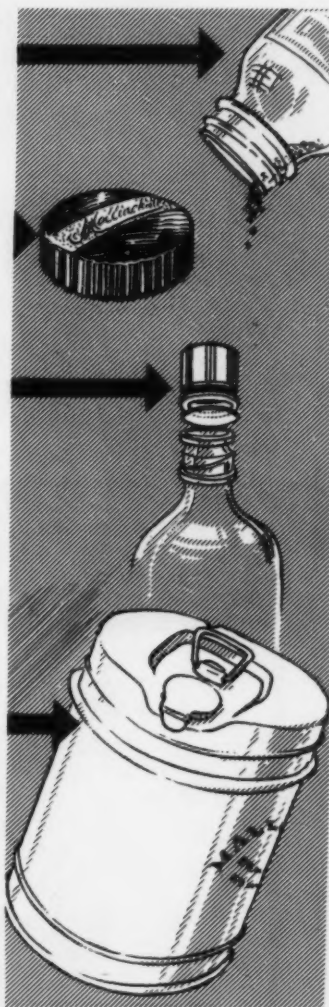
#### 4 THE FIBER DRUM

replacing boxes for bulky, dry chemicals. Sturdy, tight, cover easy to remove. Makes excellent stock package. (Not illustrated here.)

#### 5 SINGLE TRIP DRUM

for many liquids. So inexpensive they do away with return shipments. Pouring spout protected against dirt.

**FIVE** more good reasons for definitely specifying "Mallinckrodt" when you order.



**Mallinckrodt**  
CHEMICAL WORKS

SECOND & MALLINCKRODT STS., ST. LOUIS, MO.

72-74 GOLD STREET, NEW YORK, N. Y.

CHICAGO  
PHILADELPHIA

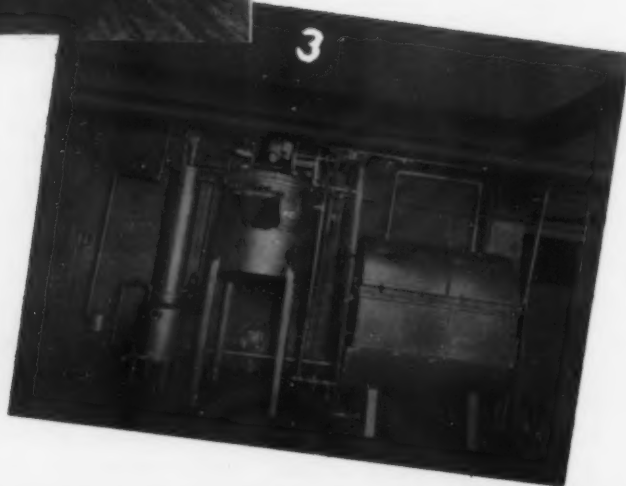
TORONTO  
MONTREAL

## Godfrey and Customers Enjoy "Reward of Progress"

"The Reward of Progress" is what Godfrey Roller Company, Philadelphia, Pa., calls its new shipping department, which is housed in a brand new building, fitted with every efficiency device to facilitate the prompt shipment of Godfrey rollers.



1. The New 100% Daylight Shipping Dept. of Godfrey.
2. The Ultra-Modern Godfrey Roller Factory.
3. According to the Godfrey Company, this vacuum process—the only one in the East—gives Godfrey Rollers 25% more tensile strength.



## A Dependable Source of Supply for DEPENDABLE PHOTO MATERIALS



Long recognized as the leading independent supply house for Negative Materials, our expansion program of recent years has resulted in the acquisition of many and varied lines of equipment pieces for use in the Photo-Engraving industry to the point where Norman-Willets Company now enjoys the distinction of being the most complete Source of Supply for all photographic and related items. This has been well exemplified in our current 120-page Graphic Arts Catalog No. 42, a copy of which has recently been mailed to every plant. Requests for additional copies, if needed, will have our prompt attention.

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**NORMAN-WILLETS CO.**

Importers - Manufacturers - Distributors  
318 W. Washington St., Phone Randolph 6300, Chicago, Ill.

"PHOTOGRAPHIC HEADQUARTERS FOR THE GRAPHIC ARTS"

THE PHOTO-LITHOGRAPHER





**COLLODIONS**  
*for*  
**Better Wet Plates**

**HYDROQUINONE**  
*for*  
**Better Dry Plates**




**EGG ALBUMEN**  
*for*  
**Better Coating  
of All Plates**

A full line of quality  
Photo-Lithographic Chemicals

●  
WRITE FOR SAMPLES

**PHILLIPS & JACOBS**

622 RACE STREET, PHILADELPHIA, PA.

Over 70 years experience in  
supplying Quality Chemicals

## *Foolish Things!*



**T**he camera is a hard, impartial taskmaster. It plays no favorites with proofs. The most minute imperfection in the proof becomes a moat in the camera's eye!

And all your fine plate making equipment and presses, even in the hands of the most skillful craftsmen, can't turn out good work except as it starts with perfect proofs.

*Decide now to install a*

## **Wagner Proofing Press**

You can buy a Wagner press for any proofing requirement, and every one, if operated by a competent man, will turn out perfect proofs—the essential to the good job.

*Write for particulars*

**Charles Wagner  
Litho Machinery Co.**

*Division of National-Standard Co., Niles, Michigan*

51-55 PARK AVENUE

HOBOKEN, N. J.

# "Swing it to OFFSET"

By EDWARD C. STERRY

**SALESMAN:** "Good morning, Mr. Smith. Need any printing today?"

**Buyer:** "No, thank you. My requirements are all taken care of. Oh, by the way, you might give me a price on ten thousand of these collection notices. Just like copy. It's only a cheap collection slip. There's nothing you can do to dress it up."

**Salesman:** "Thank you, Mr. Smith. I'll be back tomorrow with an estimate."

The next day the salesman returns with the price.

"Sorry, but your price is considerably out of line" are the first few words heard on the second call.

"That's strange" replied the salesman. "We have an efficient estimator, fast presses, and generally a good production department. About how much can you afford to pay for the job?"

"I'd rather not say. Won't you have your estimator refigure this work? It will have to be at least \$15 lower to even be considered with the other bids."

The down-in-the-mouth salesman slouches out of the buyer's presence, either promptly forgetting the incident (as well as the prospect) or else obtains a lower price, only to find that in the final analysis the house has lost money on the transaction.

This is typical of thousands of salesmen throughout the country in all branches of the graphic arts.

Now, let us contrast the order taker, or door bell ringer, with the aggressive type of salesman.

**Salesman:** "Good morning, Mr. Smith. I've called to show you a new advertising folder which my company has just produced." (He hands the buyer a copy of an attractive letter size folder beautifully lithographed in two colors, and styled as if it came from the world's greatest printing center.)

The buyer casually scans the piece.

"It seems to me," the salesman continues, "that your company could create a lot of good will and gain additional volume of business with a folder like this, designed to fit your specific needs."

Then, before the prospect has a chance to get on the defensive side, the salesman has given him a number of good sound reasons why such a piece would not be an expense but rather an investment.

This particular salesman calling on Mr. Smith is representing a reputable house operating a complete offset department as well as a letter press plant. Which may be one reason why he is so enthusiastic about his plant and product.

After what could be termed a successful interview relative to the folder Mr. Smith hands the salesman a copy of the set of collection notices given the previous salesman. With hat in hand the salesman makes a note of the quantity desired and other specifications. Then much to the surprise of the buyer, he pulls up a chair again and start to ask questions.

"How long have you been using this present form of notice, Mr. Smith?"

"About ten years now. But really I can't see what difference it makes. All I am interested in is the price."

"Of course you are, Mr. Smith. You want the best possible job for the least money. And I believe I am right when I say that you want the kind of a job that will give you the greatest returns for the money spent. I mean, that if these notices do only a mediocre job of bringing in delinquent accounts, then it is possible that you might be money ahead by not sending them out at all. You see, the typewriter ribbons, the typist's time, and the postage involved, plus the overhead all remain the same wheth-

er the notices themselves actually ring the bell or not."

For the moment Mr. Smith was stunned at this salesman's unusual interest in a common collection reminder. He had the job reprinted many times, always by the lowest bidder. And never before had he seen such interest displayed in the job.

"Yes, I believe you are right," agreed Mr. Smith. "Anyway, give me an estimate on ten thousand sets. And if you have any suggestions as to improvement I'll be glad to entertain them."

The next day the salesman returned with an estimate *in his inside coat pocket*, and in his hand a set of collection notices totally different from that which the company had ever used before.

To get to the point . . . the job was sold. Not to the lowest bidder but to the salesman who convinced the prospect that his interpretation of the job would produce results exceeding that of the old style notices.

The reproductions accompanying this article tell the story more graphically than words. (Suggested illustrations by Shinn.)

Yes . . . "Swing it to Offset" is the "buy"-word among offset salesmen today. But the swing does not stop at collection notices. It applies to almost every phase of printing. A letterhead for a photographic supply house, for instance, could be swung to offset if you incorporate an attractive illustration in the layout. A concern specializing in one or two exclusive products would do well to picture these items on their stationery. Photo-lithography will do it economically. Form work, the bulk of the cost of which is often in letter press composition, can be very economically produced by photo-offset, especially if the customer does his own ruling and typing. Price lists and tariffs are a natural for offset, to

**A**

reminder  
like this may  
save you time  
and money, and  
give you a better  
job, when next you need

*Get the next  
order from  
Illinois Plate  
Graining Co.,  
Chicago!*

**GRAINED ZINC  
GLASS, ALUMINUM  
AND MULTILITH PLATES**

*Fine Quality - Prompt Service - Reasonable Prices*

**Illinois Plate Graining Co., Inc.**

913-921 WEST VAN BUREN ST. • CHICAGO, ILL.

## MAY WE HELP YOU to speed up make readys

By reducing your paper troubles such as distortion, wrinkling, static, picking, misregister and obtaining the correct moisture content. Or if you are troubled with any of the other mechanical ills of lithography as listed below, our experience in solving these problems may help you to make substantial savings.

Moisture control and  
paper conditioning

Lack of depth and  
sharpness of grain

Press streaks and  
distorted halftone dots

Illuminating and  
arc lamp problems

Excessive plate spoilage  
and short plate life

A. C. brakes and change  
over from D. C. advice.

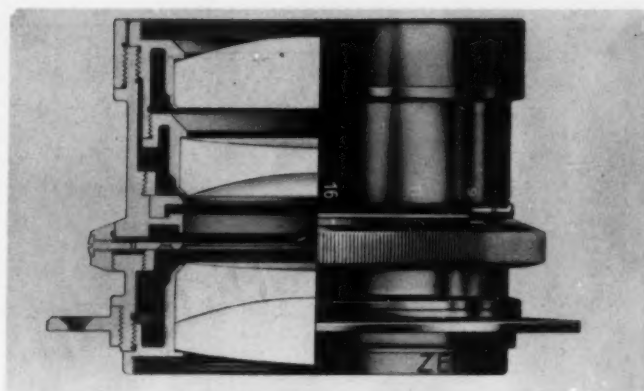
If your technical man cannot give his undivided time to the solution of your problem

**Consider Our Consulting Service**

**C. W. LATHAM ASSOCIATES**

6 LAFAYETTE AVE.

BROOKLYN, N. Y.



## ZEISS Apo-Tessar, F/9

THE high degree of correction, and the fineness of definition possessed by the ZEISS Apo-Tessar, are of great advantage in black and white reproduction, but their most striking usefulness is in difficult color work. Here the several separations may be made through different filters with the camera locked in one focus adjustment throughout. The flatness of field, and identic size in the resulting negatives, meets most exacting color process plate requirements. Catalog free upon request.

CARL ZEISS, INC., 485 FIFTH AVE., NEW YORK  
728 So. Hill St., Los Angeles



### *This Shows Why*

Actual unretouched  
photomicrographs  
show why  
**EGGSACT**,  
the processed liquid  
albumen concentrate,  
gives such distinctly  
superior results

An EGGSACT printing surface is practically free of impurities and insoluble matter, whereas ordinary egg albumen produces large surface cracks and minute fractures, due to presence of natural impurities and insoluble matter. An EGGSACT coated plate prints clear-edge impressions of the halftone dots... sensitize your plates with EGGSACT.

**IEGGSACT**

**THOR HOLLAND COMPANY**  
7048 JONES AVENUE, N. W., SEATTLE, WASHINGTON



**Memorandum**

To:

The invoices we list below are now due for payment.  
Your attention will be appreciated.

DATE	TERMS AND REFERENCE	ITEMS	TOTAL

Very truly yours,  
**WOODWARD, Inc.**

Second Memorandum  
**To REMIND You—**

That the invoices listed below are several days overdue.

Date	Terms and Reference	Items	Total

May we have your check promptly, please.

Very truly yours,  
**WOODWARD, Inc.**


**Third Notice**

To:

The following items on your account  
are **PAST DUE** . . . Please send us  
your check in full **TODAY**.

Date	Reference	Items	Total

Very truly yours,  
**WOODWARD, Inc.**




*We were disappointed  
IN NOT RECEIVING YOUR CHECK  
in the morning mail*

M.....

Don't bother looking up the invoice—  
Here are the items:

*Yours truly*  
**WOODWARD, Inc.**  
368 Bensette St  
Youngstown, Ohio



*Did You get our  
FIRST NOTICE?*

We hate to bother you with  
a second notice, but really  
we are obliged to urge you  
to send us a check . . .  
today. Thanks a lot!

M.....

*In case you've mislaid our original  
statement, we list the items below—*

*Yours Very truly*  
**WOODWARD, Inc.**  
368 Bensette St  
Youngstown, Ohio



**3 Times and OUT**

This is Your Third Notice, and  
we're beginning to think that  
we'll be "OUT" if you don't  
SEND US YOUR CHECK . . .

*The amount is only:*

If you'll send us a check  
we can thumb our nose  
to the red ink bottle.

**3**

*P.S.—We'll not  
send you any more  
notices because  
we believe your  
check is as good  
as in the mail  
Thanks!*

**WOODWARD, Inc.**  
368 Bensette St  
Youngstown, Ohio

say nothing of profusely illustrated booklets and folders.

If every salesman adopted the slogan "Swing it to Offset," with a grim determination to see how many jobs could be done by photo-lithography which are now being done by other processes, his sales would begin to mount rapidly.

And by the same reasoning, many pieces now being done by offset would not be produced at all if it were not

for this method. This places photo-lithography still in another class . . . the creative class. It means the backing of a good creative department . . . copy . . . layout . . . ideas.

Photo-lithography is now sufficiently established in the graphic arts field that it does not have to take a back seat for any process. To the contrary, it is right out in front with the spotlight turned on it. It has long since passed the multilith stage.

Buyers are demanding quality more and more. Photo-lithography is now being forced to deliver a product even more exacting than that of some of its older brothers, who are far richer in practical experience.

If the progress made in photo-lithography during the last ten years is any indication of what it will accomplish in the next decade, then it bids fair to surpass many of the older processes in the race for supremacy.

## Sell Window Displays

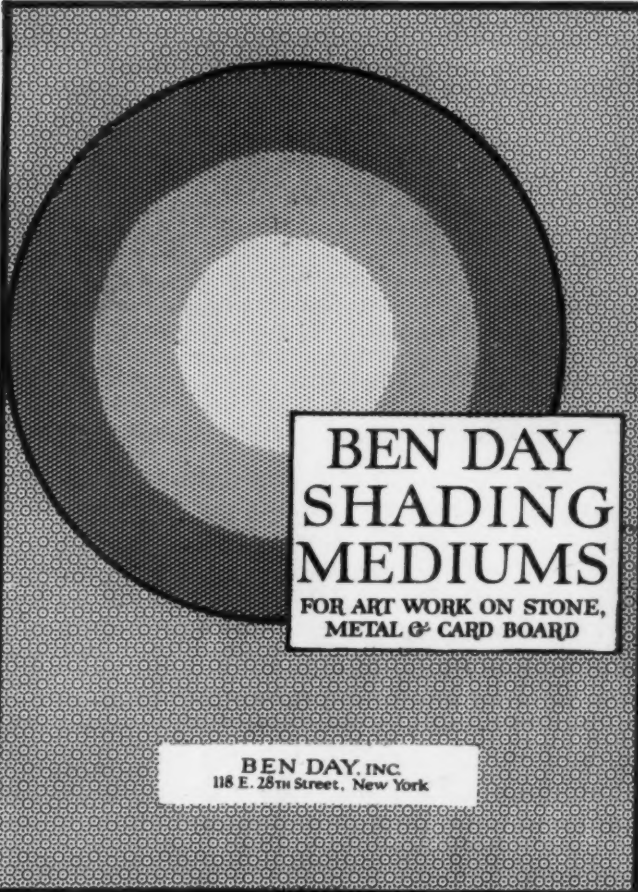
with a definite knowledge of

## Window Display Circulation and Market Coverage

- Photo-lithographers can now "fit" their logically competitive runs to suit the correct quantity needs for display campaigns.
- Not how many . . . but . . . how few displays really are needed for adequate circulation and market coverage!
- It is the BIG IDEA for YOU that I have derived from the SURVEY of the Advertising Research Foundation.

Address inquiries to: —

**WILLIAM ROBINS**  
14 W. 83rd Street, New York, N. Y.



**BEN DAY SHADING MEDIUMS**  
FOR ART WORK ON STONE, METAL & CARD BOARD

BEN DAY, INC.  
118 E. 28th Street, New York

## INCREASED

**SALES** *Our Your Answer!*

- to your use of direct mail and other advertising prepared expressly to fit your individual requirements by advertising men who know intimately the needs both of graphic arts producers and buyers.
- After a careful study of your plant set-up and market we can recommend a plan, then handle copy, layouts, typography, illustrative material and art work, choice of paper, suggest tested methods for building mailing lists; write follow-up letters, and suggest, if advisable, supporting advertising in media other than direct mail.
- Write and give us all the facts regarding your plant set-up, your competition, your market. Then we will make suggestions for single pieces or a campaign, with a budget of costs.

## ADVERTISING SERVICE

1776 BROADWAY

NEW YORK, N. Y.



**PHOTO-LITHO PLATE CO.**  
113 ST. CLAIR AVE. N.E.  
TEL. CHERRY-7514  
CLEVELAND, OHIO

## PLATE MAKERS TO THE TRADE

MACHINE MADE PLATES - -  
DEEP ETCH or ALBUMIN - -  
HAND TRANSFERS - - - -  
COLOR PROVING - - - -  
COLOR SEPARATION - - - -  
BLACK AND WHITE - - - -  
COLOR CORRECTED NEGATIVES  
POSITIVES - - - - -

**WE DON'T OPERATE PRESSES**

## LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department of Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents (in stamps). Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio.

### Photography and Color Correction

**Masking to Accentuate Highlights.** M. Leeden. *Modern Lithographer and Offset Printer*, 34, No. 2, Feb. 1938, p. 34. The use of a masking method to accentuate highlights avoids the harshness resulting when highlight methods are used. A correctly exposed negative is developed less than normal, and a second negative, given only about one-fifth the normal exposure, is prepared. The two negatives, dried and placed together in register, cut out the highlights smoothly but with great crispness. The negatives must be carefully balanced for best results. Pencil drawings and several other types of work can be reproduced with a great saving of time by use of this method. A similar technique can be used to accentuate shadow detail, and both methods may be used for a single negative to insure detail in both shadows and highlights.

**The Bassist Masking Process; Notes on Color Photography.** J. S. Mertle. *The Penrose Annual*, 40 (1938), pp. 118-20. The author describes the Bassist method and apparatus for facilitating image registration and for making half-tone exposures with or without a photographic mask in position on the separation negative during a portion of the exposure. The apparatus can be used in color work, and also in black-and-white half-tone photography for accentuating highlights. The final result of the process is a half-tone positive intended for dot-etching and subsequent deep-etch plates. A discussion is added of the Dufaycolor process, the one-exposure camera, and the repeating-back camera. The last has several ad-

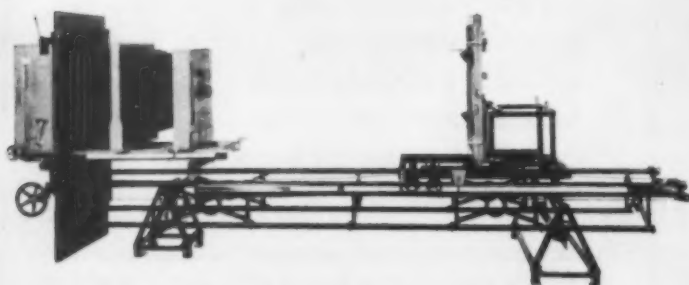
vantages not possessed by the one-exposure camera, and these advantages are explained. A reproduction of a half-tone transparency made without retouching is shown.

**Color Photography: A German Review.** (Author and source of article not given.) *National Lithographer*, 45, No. 3, March 1938, pp. 58, 69. A review is given of an article which takes up briefly the following items: (1) the principle of the Kodachrome film, (2) exposures for color work, (3) the use of paper prints for judging results, (4) the production of transparencies, (5) the production of color enlargements, and (6) Agfa film for the production of printing blocks.

**The Illumination in Three-Color Negative Making.** E. L. Turner and J. Clark. *The Penrose Annual*, 40 (1938), pp. 124-5. Open arc, enclosed arc, and gas-filled lamps were tested for their suitability as light sources for color photography and color reproduction. The exposures were controlled by an apparatus of the Illumeter K type. It was found that it makes little difference in color rendering or gradation which type of lamp is used, as long as the light does not consist largely of prominent bright spectral lines, as in the mercury-vapor lamps. Graphs are used to show the results of the experiment.

**Direct Color Photography.** A. C. Austin. *National Lithographer*, 45, 2, No. 2, Feb. 1938, pp. 20, 40. The Dufay-color reseau is described, and methods of avoiding moiré are discussed.

**An Outline of the Knudsen Process.** A. C. Austin. *The Penrose Annual*, 40 (1938), pp. 121-3. This process of color reproduction replaces the ordinary glass ruled screen with sets of special celluloid screens used in contact in a vacuum holder. These screens are used without consideration of screen distances or special diaphragms. The process dispenses with corrective handwork, retouching, and dot-etching, but the negatives must carry correct values and are checked with a densitometer. Two examples of color work, and reproductions of a pencil drawing and a photograph show the results obtainable.



Levy "C" Precision Semi-Metal Camera, Dark Room Type

For Faithful REPRODUCTION!

## LEVY CAMERAS

Standard and Dark Room Types—Made of Wood or Metal

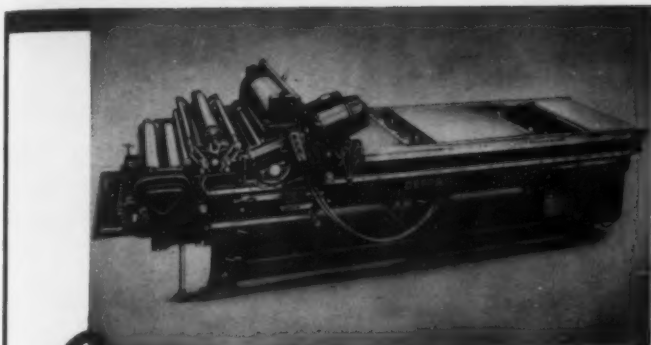
LEVY { VACUUM PRINTING FRAMES  
HALFTONE SCREENS  
LENSES LAMPS

MANUFACTURED BY

## REPRO-ART MACHINERY CO.

WAYNE AVE. & BERKELEY STREET PHILADELPHIA, PA.





*Basically new in design -*  
**THE "DEFFA" OFFSET PROOF PRESS**

is the one machine that represents a real advance in proofing methods . . . it is distinctly NOT just another proof press with a few constructional refinements. . . . it is the only machine of its kind that is equipped with a power operated automatic inking system and automatic dampening device. The ink distribution is excellent, and this, plus efficient mechanical dampening insures proofs that reflect the true value of the plates, with color that will be the same as when the job is actually run. . . . these, and many other important advances in design can be quickly demonstrated in our showrooms, where the "DEFFA" is now in operation - your inspection is invited. For additional information, write to

**KARL Krause U.S. CORPORATION**  
61 37 KANDAM STREET, NEW YORK - WALKER - BROS - KABLE ADDRESS, U.S.A.



**COLOR SEPARATIONS •  
 BLACK AND WHITE •  
 • COLOR CORRECTED  
 NEGATIVES READY FOR  
 THE PHOTO-COMPOSING  
 MACHINE • POSITIVES •  
 PROVING • • PRESS  
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**Positive or Negative Copy Patterns.** F. H. Hausleiter. *German Patent* No. 654,781 (Feb. 10, 1938). Process for producing positive or negative copy patterns of screen or line positives or negatives by use of a wash-off relief, characterized in that a light-sensitive coating present on a transparent substratum capable of being colored is washed out after exposure under the negative or positive, the substratum is colored on the bare places with a dye-solution not affecting the wash-off relief, and the wash-off relief is removed.

**Reproduction with Agfacolor Small-Size Film.** G. von Kujawa. *The Penrose Annual*, 40 (1938), pp. 115-117. The use of the new fast Agfacolor film for the production of copy for reproduction, as well as to aid the retoucher, is described. The absence of silver grain makes it possible to enlarge the image to any desired size. An example is included.

**Dufaycolor Transparencies.** M. C. Statler. *The Photo-Lithographer*, 6, No. 3, Mar. 1938, p. 18 and insert. The reproduction of Dufaycolor transparencies is discussed. The best results cannot be obtained unless the proper filters are used in making the color separation plates. The Dufaycolor "S" filter series cuts down subsequent operations to a minimum and insures proper color separation. Wratten sets may also be used, but more correction is necessary. Film can be obtained in sizes up to 11 by 14 inches. The elimination of moiré is discussed briefly.

**Kodachrome in Photo-Lithography.** J. McMaster. *The Photo-Lithographer*, 6, No. 3, Mar. 1938, pp. 38, 40, 42, 44. The development of Kodachrome film is described briefly, and the use of this film in preparing copy for reproduction is discussed. Enlargements up to 14 by 21 inches have been made without loss of definition. The article includes a discussion of Kodachrome transparencies suitable for reproduction, the selection of the lens for enlarging the transparency, filters for the color separation work, apparatus to be used in enlarging, and plates for half-tone color separations. The dot-etcher uses the original Kodachrome transparency as a guide in correction.

**The Diminution in Illumination at the Edge of an Image.** T. Mendelssohn. Part I. *Photographic Journal*, 76, Sept. 1936, pp. 505-7. Part II. *Photographic Journal*, 78, Mar. 1938, pp. 128-9. The causes of diminution of illumination are: (1) the lens mounting has a vignetting effect, (2) the Lambert Cosine law may not hold for rays falling obliquely on the emulsion surface, (3) the reflection losses at the glass-air surfaces of the lens may be greater for oblique rays than for axial rays, (4) extra absorption losses may result for oblique rays. Experiments showed that the diminution is principally due to causes (1) and (3).

## Planographic Printing Surfaces and Plate Preparation

**Making Offset Plates.** Anonymous. *Printing Equipment Engineer*, 55, No. 3, Dec. 1937, p. 21. A detailed description is given of the simplest method of producing offset plates: by making contact negatives direct from copy and reproducing same size as the copy.

**Printing-Surfaces.** A. R. Trist. *British Patent* No. 475,902 (May 29, 1936). A lithographic printing-plate is provided with a mat surface of chromium in a crystalline state. Such a surface may be made grease receptive by treatment with acids such as hydrochloric or hydrobromic acid or by arranging it as a cathode during electrolytic treatment in an acid bath, and the grease receptive surface may be rendered grease repellent by treatment with an oxidizing agent such as nitric acid, peroxide of hydrogen, tannic acid, chromic acid, potassium permanganate or potassium chlorate. The surface may be formed on any suitable base which may be metallic, e.g., of zinc, tin, or iron with or without a copper coating, or may be non-metallic, e.g., of paper, cellulose derivative, or artificial resin provided with a suitable conducting surface. The mat crystalline chromium is preferably deposited electrolytically from a bath containing about 60 per cent chromic acid, and 0.6 per cent sulphuric acid at a temperature of from 5-7° C. using a current density of about 250-350 amperes per square foot at a potential of about 9 volts.

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## Equipment and Materials

**New Chemicals for Lithography and Their Uses.** W. H. Wood. *Lithographers' Journal*, 22, No. 12, Mar. 1938, pp. 519, 539. A brief discussion is given of the various types of lithographic plates and of some of the chemical principles which underlie lithographic printing. It is stated that chemical research is now helping the lithographer. Synthetic colloids with controllable properties have been found which show marked advantages over the natural materials.

## Paper and Ink

**The Practical Lithographer: Ink Drying.** "Practical Lithographer." *British and Colonial Printer and Stationer*, 122, No. 488, Feb. 24, 1938, pp. 190, 192. Explanations are given for two practical problems (1) why inks which form a hard skin in the can overnight do not dry overnight when printed on paper, and (2) why printed matter will dry in some cases in the centers and remain wet at the ends of the sheets.

**New Developments in the Ink Industry.** R. J. Butler. *The Photo-Lithographer*, 6, No. 3, Mar. 1938, p. 54. A brief summary is given of advances made recently in the fields of ink vehicles, pigments, and driers. The fast, hard-drying, non-skinning inks are products of new synthetic vehicles and driers. Gloss inks, overprint varnishes, and tin printing show marked developments.

**Carbon Gas Black: Technical Methods of Control for the Printing Ink Industry.** G. L. Roberts. *American Ink Maker*, 16, No. 3, Mar. 1938, pp. 18-21. Some of the more important test procedures used in the technical control of carbon gas black are described in non-technical terms. The article takes up equipment required for these tests, and methods of testing for color value, tinctorial power, flow properties of inks, oil absorption, and apparent density.

**The Properties of Dry vs. Flushed Colors.** H. L. Beakes. *American Ink Maker*, 15, No. 11, Nov. 1937, pp. 19-23. The particle size, dispersion, tinting strength, hiding power, mass color, gloss, and light-fastness of flushed colors are discussed, and the conclusion is drawn that, price being equal, the ink maker with good mill equipment and proper ink production methods can produce from dry ground colors, inks equal or superior in quality to inks made from flushed colors. A number of photomicrographs are included.

**The Trend in the Pigment Color Industry.** L. E. May. *American Ink Maker*, 15, No. 11, Nov. 1937, pp. 16-8, 45. The author describes the development of organic colors and discusses the present trends toward (1) the use of wetting agents to produce inks of controlled viscosity, (2) the development of inks of improved tinting strength and brilliance.

**Method of Producing Glossy Surfaces on Printed Work and Products Thereof.** Hans Schaefer. *U. S. Patent* No. 2,110,682 (Mar. 8, 1938). As a new article of manufacture, a highly glossy printed product comprising a base, a conventional print on the surface of said base, and a screen constituted of fine lines of lacquer, devoid of pictorial designs printed onto the surface of said conventional print and forming a highly glossy coating thereon.

**Instrumentation Studies. XXI. A Study of Photoelectric Instruments for the Measurement of Color: Reflectance and Transmission.** Institute of Paper Chemistry. *Paper Trade Journal*, 105, No. 25, Dec. 16, 1937, pp. 46-50. The General Radio Color Comparator Type 725-A is intended for matching colors and for the measurement of "brightness" and opacity. The design and operation of the device, its special characteristics, and its effectiveness as a means for measuring "brightness" and opacity, and for the matching of colors are discussed.

## General

**Importance of Extreme Accuracy of Pressure in Offset Lithography.** C. W. Latham. *The Photo-Lithographer*, 6, No. 3, Mar. 1938, pp. 27-8, 30, 32. The effects produced by excessive pressures in offset printing, and methods for maintaining correct pressures are discussed in detail. Diagrams show why careful adjustments are needed and how they are made.

**Lithography on Metal vs. Paper.** W. N. Misuraca. *National Lithographer*, 45, No. 3, Mar. 1938, pp. 26, 28. The procedures used in lithographing on metal and on paper are analyzed and compared. The two methods are alike in general, differing only in that in metal printing (1) sketches must be more exact as to size and layout, (2) inks must be more carefully chosen (for heat resistance and the like), (3) methods of feeding and delivery are different, (4) the speed of printing is slower, (5) metal is not absorbent to water or ink, and (6) varnishing and such operations on metal have no relation to lithography.

## Miscellaneous

**Collotype or Photo-Gelatin Printing.** F. O. Sullivan. *National Lithographer*, 45, No. 2, Feb. 1938, pp. 16-7. Collotype is a planograph process because the image is printed from a plane surface. Continuous-tone negatives are used in the process, resulting in the reproduction of a complete range of tone values. The procedure of making and printing from collotype plates is described briefly.

**The Showcard Process of Today.** J. H. C. Hubner. *British and Colonial Printer and Stationer*, 122, No. 488, Feb. 24, 1938, pp. 201-3. The production of showcards and displays is described, particularly as regards the mechanical problems of making cutouts, turned-over-edge cards, and the manufacture of fittings. The choice of materials and adhesives, and the necessary cooperation between the showcard manufacturer and the printer are discussed.

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## Macbeth Lamps Popular

The new Macbeth method of mounting lamps on overhead tracks has created a very favorable impression in various lithographic plants in this country and abroad. This method of illumination is superior to that of attaching lamps to copy board, because with the overhead trackage there is no weight on the copy board to cause vibration or deflection. The lamps move backward and forward on roller-bearing mountings with practically no resistance. There is no load on the copy board shifting mechanism to interfere with accurate focusing. Without question, the overhead installation of lamps to move with the copy board has been successfully solved by this new Macbeth arrangement.

The lamps are mounted so that they are counterbalancing and can easily be moved up or down independently or together. They also have special long hinges permitting an extensive adjustment of the lamps toward or away from the copy board. Lamps may be swung in and out, so that proper angle and best coverage are assured.

The overhead track arrangement is equally good for direct or indirect lighting. The tracks extend beyond the copy board; and for indirect, positive shots it is only necessary to run the pendants down beyond the copy board and swing the lamps around in position.

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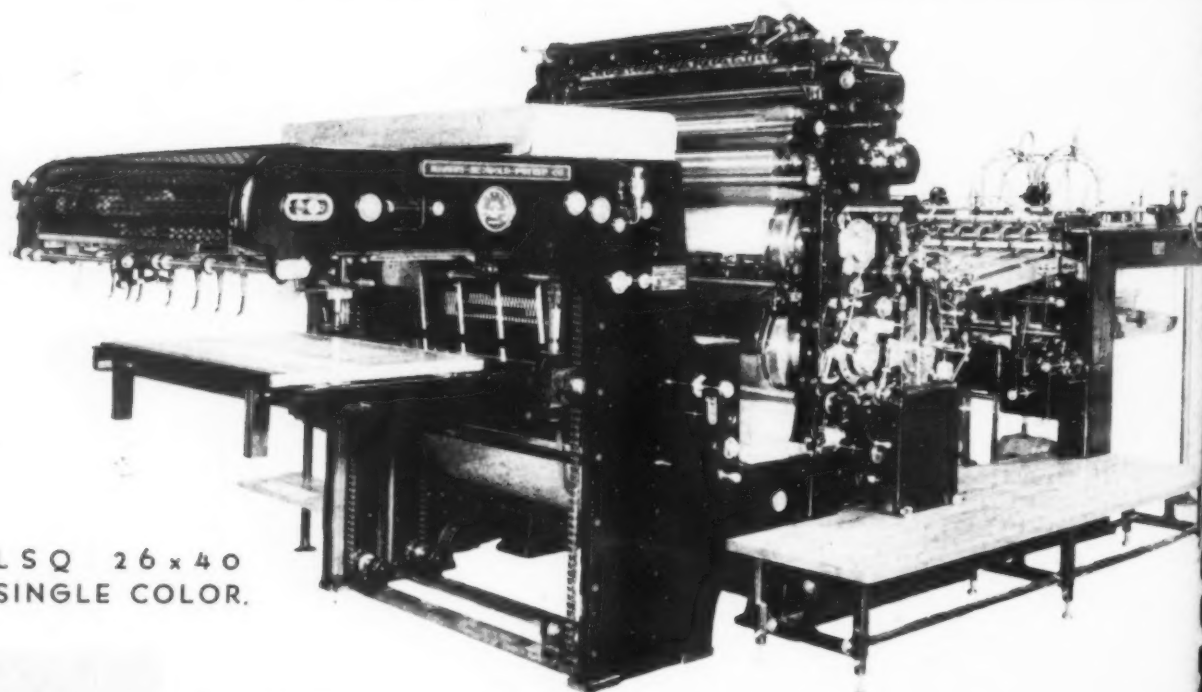


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## **LEADERSHIP** *that Insures*

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*Factories:* Cleveland, Dayton.

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